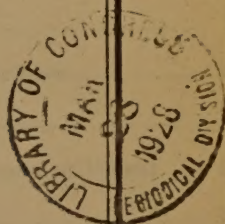


(v. 7 complete in 2 issues)

THE BIOLOGIST

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CONTENTS

Roll of Active Chapters	1
Lowell Evan Noland, an appreciation, by Everett F. Davis.....	3
An Appreciation of Erwine Hall Stewart, by Ira E. Cutler.....	4
 Editorials:	
<i>Stand Behind the Editor</i>	
<i>"The Tripotage"</i>	
<i>Let the "Honorary Societies" take warning</i>	
 High Lights from the Convention	 8
National Council Meets to decide Matters of Importance.....	10
What the Chapters are Thinking About	12
Outlook Augurs Bright Future (chapter installations, petitions).....	17
Chapter Reports	18
Kansas City—Goal for 1925	26
Passing the Buck, (exchanges)	27
 <i>The COMPASS</i>	
 <i>The ALPHA OMEGAN, "Fraternalism"</i>	
 A Look Forward	 31
Report of the National Treasurer	33
The First Phi Sigma Convention	34
Constitution of Phi Sigma Society	35
Phi Sigma Chapters Flourish in Neglect	42
Phi Sigma Society National Convention	43-70

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THE BIOLOGIST

OFFICIAL PUBLICATION OF THE

PHI SIGMA SOCIETY

VOLUME 7

DENVER, COLORADO, APRIL, 1925

NUMBER 1

NATIONAL COUNCIL

National President

PROF. IRA E. CUTLER

University of Denver, Denver, Colorado

National Vice-President

DR. LOWELL E. NOLAN University of Wisconsin, Madison, Wisconsin

National Secretary

PROF. C. I. REED

Department of Physiology, University of Chicago

National Treasurer

ERWINE HALL STEWART

Mesa, Colorado

ROLL OF ACTIVE CHAPTERS OF PHI SIGMA

ALPHA

Ohio State UniversityColumbus, Ohio
(Temporarily inactive)

BETA

University of MichiganAnn Arbor, Michigan
Secretary, CARL ERLANSON213 Observatory, Ann Arbor, Michigan

DELTA

University of MaineOrono, Maine
Secretary, E. B. GRIFFITHSPhi Eta Kappa, Orono, Maine

EPSILON

University of DenverDenver, Colorado
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ETA

University of AkronAkron, Ohio
Secretary, PAULINE HENRY.....85 Merriman Rd., Akron, Ohio

THETA

Michigan Agricultural CollegeEast Lansing, Michigan
Secretary, W. J. ROBERTS Dairy Dept. M.A.C., East Lansing, Michigan

IOTA

Washington University St. Louis, Missouri
Secretary, MRS. EDGAR ANDERSON
..... Missouri Botanical Garden, St. Louis, Missouri

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NU

Washington and Jefferson College Washington, Pennsylvania
Secretary, AUGUST SISMONDO
..... 418 Hayes Hall, Washington, Pennsylvania

OMICRON

University of North Dakota Grand Forks, North Dakota
Secretary, IRENE PRITZ Dept. of Biology, Univ. of N. Dak.

XI

University of Nebraska Lincoln, Nebraska
Secretary, WALLACE BUCK 435 North 25th St., Lincoln, Nebraska

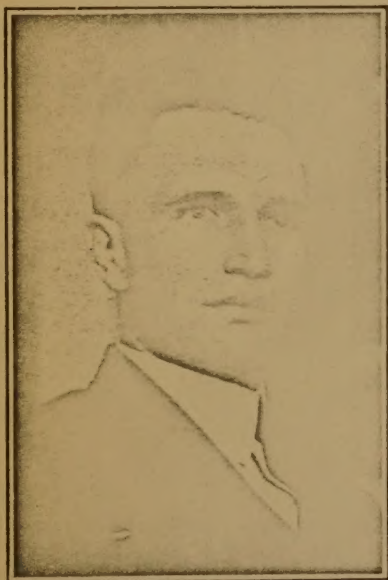
PI

Emory University Atlanta, Georgia
Secretary, J. M. ELLIS Dept. Biology, Atlanta, Georgia

RHO

University of Illinois Urbana, Illinois
Secretary, EDWARD DEVEREUX Dept. of Bacteriology, U. of Illinois

ZETA PRESIDENT ELECTED TO FILL HIGH NATIONAL OFFICE IN FRATERNITY



OFFICERS and delegates alike are profuse in their expression of confidence and fidelity to Lowell Evan Noland, recently re-elected Vice-President of Phi Sigma Society.

Born in Lee, Indiana, 1896, and receiving his secondary education in a high school which received the name "Rolling Prairie", an agnomen which well characterized the regular contour of the land, this young man laid the foundations for high scholarship which later in De Pauw University won for him the coveted Phi Beta Kappa key.

After graduation and a year of teaching he enlisted in the Medical Corps of the United States Army, May 30,

1918. He found his way overseas for nine months' active service in the war zone. After his discharge and a brief rest he enrolled in the University of Wisconsin for his Master's degree and while there in 1920 he became actively associated with ZETA of Phi Sigma.

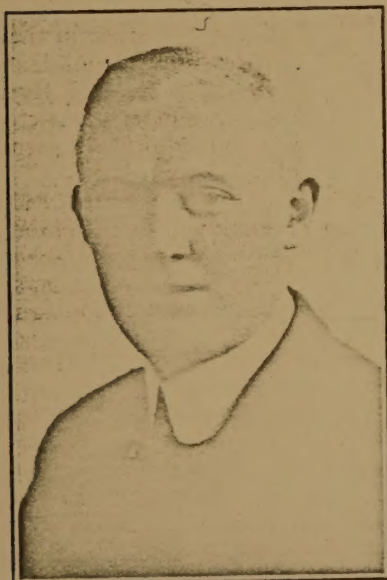
Although other honorary societies such as Sigma XI and Gamma Alpha held out their welcoming hands of good fellowship to this young man who was fast distinguishing himself by conscientious effort and the production of work of a high caliber, it was Phi Sigma alone that completely appreciated his ability to lead and to organize, and elected him chapter president in 1922-23 and to the National Vice-Presidency 1923-25.

"Dr. Noland has won his way to the doctorate by hard and conscientious work, to the appreciation of his students by his understanding of their difficulties, and to the position that he now holds in Phi Sigma by his self sacrificing industry for all that concerns the good of his chapter in particular and the whole society at large."

He is a member of the Ecological Society of America, American Microscopical Society, Wisconsin Academy of Science, and when he is not surrounded by his books and work in the research laboratory, one to happen in upon his cheerful home would find him a very devoted and helpful husband to Mrs. Noland, who was before her marriage Miss Ruth Chase, daughter of Professor W. J. Chase of the University of Wisconsin.

Surely the future holds in store bright prospects for our friend who is so devoted to his family, his fraternity, and his professional calling.

SERVING HIS EIGHTH YEAR AS COLLECTOR OF REVENUES



MR. Erwine Hall Stewart was born and reared in Colorado. As we say in Colorado, "He is a Genuine Colorado Product". His early education was cared for by his mother since they lived far from any public school.

He entered Warren Academy, the preparatory school of Denver University, completing the four years' course with honors. Immediately upon graduation he entered the University of Denver, majoring in the biological sciences, winning his A. B. and A. M. degrees. He was assistant in the Biological Department for three years. During the war he was overseas serving his country in the medical corps.

He was always distinguished for a lively interest in all activities in college, for his outspokenness, his loyalty to his friends and the institution with which he was connected, ready to lend a helping hand in any good cause.

He was active in establishing the chapter of Lambda Chi Alpha at the University of Denver and for some years he has been their national treasurer. He was one of the founders and charter members of Pi Beta Omega Biological Society which later became Epsilon Chapter of Phi Sigma Biological Research Society, of which he is national treasurer and has been for some years.

Mr. Stewart can always be depended upon to do the thing at hand in a most efficient and businesslike manner. Phi Sigma is fortunate in securing such a man for its treasurer.

THE BIOLOGIST

OFFICIAL PUBLICATION, PHI SIGMA SOCIETY
PUBLISHED TWICE YEARLY, IN DECEMBER AND MARCH

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Missouri Botanical Garden, St. Louis, Mo.

Editor and Manager
EVERETT F. DAVIS

STAND BEHIND THE EDITOR

It is with this issue that a new hand guides the editorial policies of this publication. The responsibility of reflecting the sentiment of our members rests on the shoulders of the Editor. Interests and opinions in Phi Sigma Society are varied and diversified for our membership includes workers in many wide and broad biological fields of research. There is no way by which the Editor can better feel the pulse of the Society than by direct communication with its members, whether as individuals or as collective groups representing the local sections of the country. Write the Editor with every constructive suggestion you can offer for the improvement of *The Biologist* and Phi Sigma Society. Such letters have come to the Editor's desk all too seldom in the past. It is a physical impossibility for one man to cover personally all the fields of research represented in our society. When you find a recent publication of a past or present active member of Phi Sigma drop the Editor a card with the name of the author and the exact reference of the article with perhaps a word telling him as to what good use you were able to put the article. Help us to keep *The Biologist* alive and up to date. Individual members can be of great assistance to the Editor in locating hidden mines of information. Your energetic cooperation will make this paper and your society HUM!

"THE TRIPOTAGE"

Every chapter should keep *The Biologist* filed for binding. Watch your program committees, Mr. (or Miss) President! Keep them on the job. Short and snappy programs given by

the student members upon their research problems should be, to our way of thinking, a very desirable feature of your meetings.

Would you like a "Contributor's" column in your paper? The idea would be something like this: Let it be an exchange for the expressions of individuals who desire either to suggest or to seek information and ideas which will be of general interest to the members of the Society or will benefit our fraternity as a whole. We solicit, then, your constructive criticism of pieces of investigation carried on by members of Phi Sigma, limited to those articles which are either abstracted or published in full in *The Biologist*.

It is hoped that all of your questions concerning either Phi Sigma organization or biological research in your field or in any other, will be satisfactorily answered by such authorities as we have in our own Phi Sigma Society. Your suggestions for the good of the entire Society will make us stronger and better able to meet your needs.

What about "Colonization" as a practical scheme for expansion for our fraternity?

LET THE "HONORARY SOCIETIES" TAKE WARNING

"ARE YOU PICKING GOOSE FEATHERS" is the title of an editorial that has appeared in the magazine of one of the largest National Greek Letter fraternities in the country. This editor takes a positive stand upon the various organizations and societies which find their way into the life of our colleges and would discriminate between those which choose men who have for their purpose a desire to work for the definite aims of the society, to encourage those within it, and to contribute some small bit for its improvement and helpfulness, and those who are but after "Goose Feathers", to rush into their useless "honorary society".

"Has the wave of 'honorary societies' been carried to the extreme? It is an inherent right of a man to 'join'. But from this coign of vantage it seems that there are too many useless organizations in existence on our campuses today. The returns are not commensurate with the energy expended in them.

"This is not an attack on legitimate societies whose purposes are to encourage proficiency in the really worth while affairs of university life. We do believe, however, that a warning

should be sounded against the tendency to carry the 'joining habit' to excess."

Appreciation for Professor Reed, entrepreneur and National Secretary who is personally known to many of the readers of *The Biologist*, and known to all by reputation, has been given again and again by members and officers of each and every chapter. He shares alike with all our national officers the high esteem and the love which grows among men who are constantly associated together in common tasks. Every wide awake worker in Phi Sigma who is willing to enlist his or her services with the leaders, is duly appreciative of the personal sacrifices which very often become necessary on the part of those who are elected to serve the whole.

"TRIPOTAGE"

How can we Interest our Alumni? Think it over: Best article sent to the Editor will receive special recognition in the *Biologist*. Let's make it a symposium of ideas pertaining to this very important and vital subject!

Know thine own fraternity.

Adib Karam, send us another "rip-snorter", something just as good, with pathos just as strong in your voice, for the next *Biologist*. Of course if you can improve on "An Expression" don't hesitate to send that too.

Mention should be made of Omicron's chapter report. We were pleased to see the names and problems of research enclosed therein. It speaks volumes for the standard of that chapter, but better still, it gives an opportunity for those interested in the same problems to correspond with one another concerning their work. Very often such mutual aid affairs will result in making permanent ties of friendship. If so, then Phi Sigma is worth while.

Theta initiates the "open house" idea, an entertainment for all those interested in biology on the campus.

What appears on the last page of this issue? Well look and find out!!!!



HIGH LIGHTS FROM THE CONVENTION

As Seen by the Members of the National Council

Enthusiasm Runs High for Kansas City in 1925

President Cutler remarked after the Convention: "The stimulating influence of the Convention has put the very life into the organization". He is further quoted as having said: "If only a small portion of the enthusiasm manifested at the Convention is passed on to the members of each chapter, the success of this program and of the convention to come is absolutely assured. The most significant, the most far-reaching thing decided upon was the program to be put on by our members at the next meeting, which will be held in connection with the *A.A.A.S. at Kansas City, December, 1925.*"

Doctor Cutler strongly urges the "heartly cooperation of all our chapters to make this program worth while."

"The Amount of Work Done in the Short Time Available is an Accomplishment without Parallel in my Knowledge of Legislative Bodies," writes Secretary Reed.

"While my impressions are to some extent set forth in the general report of the Convention, there are certain points which I wish especially to emphasize. In the first place, the mature point of view of the delegates was striking and gratifying and serves to neutralize to a large extent the often expressed fear that a society composed of members in the early stages of scientific development cannot accomplish anything toward the ultimate advancement of science.

"The willingness to lay aside local issues and to consider only matters of general importance was also noticeable and gratifying."

"While I acknowledge that, from my own point of view, I should like to have seen several matters disposed of in a different manner, I am nevertheless entirely satisfied with the results, since I recognize always that the majority opinion must rule."

Our Future Promises a Spirit of Cooperation, Unity and Solidarity

"A splendid spirit of cooperation and a unanimous desire on the part of all the delegates present to advance the interests

of Phi Sigma made participation in the Washington convention a real pleasure. With regularly recurring conventions provided for, we can confidently look forward to the achievement of greater solidarity and unity of purpose that will unquestionably enhance our effectiveness as a national body. The plan for a Phi Sigma session for the reading of scientific papers in connection with the A. A. A. S. meetings appeals to me as a most encouraging prospect. It offers the beginner in biological research a chance to bring his work before an audience from whose criticisms and suggestions he may derive much profit and encouragement. The revision of the constitution has resulted in a clearer document, more adequate for the needs of our present organization. The future promises a place of greater usefulness and influence to Phi Sigma if she lives up to the worthy start that she has made." From National Vice-President Noland.

Society Well Paid for All Sacrifices

Treasurer Stewart reflects the spirit of the Convention from the mountains of Colorado. While he did not attend the Convention, no one can deny that he has assimilated the note that was sounded there, which shows it to be a very contagious bug when it once gets a foothold any where.

"Much has been accomplished in the short time that the delegates and officers had to work in at the meeting and by next year we hope to be in shape to accomplish even more in a short period.

"The spirit of union and the stimulus for greater activity has well repaid the society for the sacrifices that have been made for the Convention. The plan, however, for a meeting both in 1925 and 1926 will place a heavy burden on the organization in a financial way, considering our slender resources.

"I feel certain that the get-together that we have had will aid us a great deal both in the realization of our scientific aims, maintaining the proper scholastic standards, and in the routine and financial administration of affairs. I hope to see the next convention do something to induce more of the alumni to subscribe to *The Biologist* as that would be very desirable both fraternally and financially."

Mr. Stewart has further emphasized the fact that there can be no greater stimulus to research in biology than the A.A.A.S. meetings for those who attend them.

NATIONAL COUNCIL MEETS TO DECIDE MATTERS OF IMPORTANCE

Hotel Raleigh Receives Our President, Vice-President, and
Secretary Before the Opening Date of the Convention

Perhaps never since the frail beginnings, when Phi Sigma was but an infant in arms has a group of biologists been gathered who were so anxiously concerned over the welfare and life of our society as this small but representative group of loyal hearts who gathered in the upper rooms of the Hotel Raleigh for a deliberate and questioning discussion of issues and future policies so vital to the contiguity of this organization. There were matters of grave importance to be considered. It has previously been discovered that Phi Sigma Society has outgrown her swaddling clothes. But the outfitter's task could not have come to a better qualified group of artisans or persons more appreciative of her needs than those who bravely gathered to undertake the task of remodeling our constitution and completely overhauling our local government.

In the informal sessions of the NATIONAL COUNCIL which preceded and led directly into the general assembly on Monday, the following resolutions were adopted:

FIRST, that the petition from the group in Duke University (Trinity College) be tabled until the opening of the school year 1925-26, at which time it will be taken up for further consideration.

SECOND, that an official notice of the installation of Pi Chapter be published in *Science* as early as practicable.

THIRD, (A) that the date for the convention to be held in 1925 be set for Monday, December 28, 1925, which is the opening day of the annual meeting of the American Association for the Advancement of Science, in Kansas City, Mo.

(B) That the morning session be a business session, the afternoon session a scientific program, at which papers shall be read by active members of Phi Sigma, whether delegates or not. Also that provision be made for papers to be read by title.

(C) That in consideration of extra expense involved in the long trips, all delegates traveling more than 300 miles be allowed Pullman fares, as well as one and one-half railroad fares for the round trip.

(D) That all delegates, in order to receive reimbursement for any part of traveling expenses, must be on time for the opening session and must remain throughout both sessions.

FOURTH, that the publication of *The Biologist* be confined to two issues, the first to appear on or about December 1 of each year and to be devoted to matters of purely scientific interest, that is, original papers, briefs of original papers, or abstracts of papers already published by members of Phi Sigma; a second issue to be devoted to matters of general interest, reports of chapter activities, communications from officers, and communications and discussions by members, whether active or otherwise.

FIFTH, that the provisions of the constitution specifying specialization in biological sciences as a qualification for membership be interpreted to include the following designated scientific departments:

Agriculture	Genetics
(x) Agricultural chemistry	Histology
Agronomy	(x) Home economics
Anatomy	Horticulture
Animal husbandry	Hygiene
Anthropology	Immunology
Apiculture	(x) Medical sciences
Bacteriology	(x) Nutrition
Biology	Ornithology
(x) Biochemistry	(x) Paleontology
(x) Biophysics	Pathology
Botany	Pharmaceutical sciences
Dairying	Pharmacology
(x) Dietetics	Plant chemistry
(x) Dental sciences	Plant pathology
Embryology	Plant physiology
Entomology	Physiology
(x) Eugenics	(x) Psychology
(x) Field crops	Soils
(x) Forestry	(x) Veterinary sciences
(x) Geology	Zoology

It shall be understood that in the subjects designated (x) only those persons engaged in specifically biological problems shall be eligible for membership in Phi Sigma.

WHAT THE CHAPTERS ARE THINKING ABOUT

Letters of Enthusiasm, Loyalty, and Appreciation

Let them speak for themselves:

BETA

Lewis E. Wchmeyer

"It seems to me that the thing most to be desired would be that the spirit of hearty cooperation present in the convention could be brought to the members of each chapter. The society was fortunate in its choice of officers and delegates. After the convention the feeling that Phi Sigma was now a truly national group, and not so many scattered chapters, was apparent. There was also the feeling that we had emerged from the egg, so to speak; that we had now passed through our first period of expansion; and that we are now prepared to become an established and recognized body. The changes in the constitution and other routine business of the convention will come before all of us in due time but it is the personal realization of, and cooperation in the problems of the society which the delegates themselves should bring back to their chapters."

ZETA

Rev. A. M. Keefe

"A little group of pioneers met for the first time to re-shape a constitution and lay solidly the foundations for that "Castle in the Air"; a National Honorary Biological Research Society. Of course there was discussion, and argument; opinions freely given and opinions stubbornly contested. There were concessions made here and restrictions imposed there, but through it all ran a unifying desire to re-mould Phi Sigma on stronger, surer, and more lasting lines. That many things done in the first convention may be undone in later gatherings matters but little. The real start has been made and through these first precious inter-chapter contacts shall come the impulse towards the greater Phi Sigma Society of the future."

"Zeta chapter awaits with interest the new constitution of Phi Sigma as it was rewritten in the 1924 national convention.

In a business meeting on January 12th a review of the convention's efforts was presented by National Vice-President Dr. L. Noland and by the Chapter Delegate, Rev. A. M. Keefe. In as far as the chapter was able to judge from the reports, naturally so incomplete, the work of the convention ought to give the society new vigor and enthusiasm."

ETA

Adib Karam

Reports fine weather in the Capitol City

An Impression

"Half the pleasure of attending a convention is the opportunity to meet, observe, and study the delegates who represent schools as far east as the University of Maine, and as far west as the University of California.

"I believe I shall devote my paragraph of impressions to the chap from the University of Maine—the place where, according to his own story, the weather was so cold and the gales so fierce (one hundred miles an hour, I think he said) that no one dared to put even a nose out of doors for fear that it would be frost bitten.

"When we take an umbrella along to prepare for the expected shower and the unexpected happens, we often feel disappointed! So it was with my friend, Mr. University of Maine. Bundled with fur-lined coat, ear muffs and galoshes from the frigid 'jumping-off-place', he arrived in Washington to find the sun shining and the birds singing—not a patch of snow anywhere. It was with the heartiest look of disgust that he showed me his two heavy bags packed with the useless apparel.

"It was easy to forgive him his accent, although it was he who asked me how many weeks it took to travel from the wilds of Ohio to Washington, and whether it was still necessary to carry Winchesters to school on account of the pesky redskins—all this in Akron, Ohio, the rubber center of the world, a stone's throw from Cleveland, fifth city of the United States, and twelve hours train ride from Washington, D. C. I wonder what he would have thought had he known that it took him twice as long to get to Washington as it did me. But, believe me, a more pleasant and charming fellow than Mr. University of Maine I do not expect to meet."

THETA

F. W. Fabian

"We see for the first time what a really big fraternity we are and a glimpse into the future to see our potentialities. Men we knew by name only talked to us and by their personalities we have made the society a living and vital reality.

"I have not a word of criticism to offer. I think it was a good job well done and my chapter welcomed every change we made and received the report of the convention very enthusiastically."

Mr. Fabian was likewise impressed with the marked emphasis on research.

IOTA

Mrs. Edgar Anderson, Sec.

Miss F. Fern Smith, Delegate

"The reaction of Iota chapter was in general favorable. We believe that it is an excellent and beneficial thing to be associated with the A.A.A.S. and to hold national meetings at this time. In the discussion after the report of our delegate several points were raised and quite enthusiastically debated; namely, the advisability of holding a separate Phi Sigma session each year; the value of such complete and centralized (i. e. pertaining to the activities of the NATIONAL COUNCIL) national organization and the future status of THE BIOLOGIST; all were debated with much open-mindedness. For the latter it was generally thought to continue THE BIOLOGIST as a dignified organ of our society. However, it was recommended that the editor should receive for publication such articles by young research workers as are of such elementary character as to prevent their immediate recognition by more learned biological periodicals of long standing."

MRS. E. A.

"This first national convention, probably the greatest event in Phi Sigma since its inception, has been fundamental, not only in transacting most important legislation concerning the national organization, but in enabling those present to learn to know such men as Professor Reed, who is a virtual embodiment of the ideals and principles for which Phi Sigma must stand if it is to be a live and flourishing national organization. It is to be hoped that the delegates have been able to instill into their respective chapters the enthusiasm and the spirit of cooperation which was so keenly felt by every member present."

F. F. S.

KAPPA

Parke Woodward

"Perhaps the greatest good that was done was the simple getting together in discussion of all the delegates from all over the country. The fact that we are meeting in convention with a great scientific organization helped us to realize that we might have a part in the development of the science in our time. In providing for the continuance of these gatherings in years to come I think that the first convention in Washington did more for the development of the society than any other one thing."

MU

Harold Kirby, Jr.

This is the third year that Mu Chapter has enjoyed membership in Phi Sigma, and certainly we have profited by membership in the National Organization. At the University of California there is a large group of biological students, so that we adhere to the principle of limiting the membership largely to graduate students, taking in only those undergraduates who are especially promising. Our membership is distributed among the college of liberal arts, the college of agriculture, and the medical departments. Some of the best active members have been in the schools of medicine and agriculture, where there is some excellent research work being done in physiology, biochemistry and other subjects, genetics, entomology, and plant pathology.

Business meetings have been combined with the programs, and have been, on the whole, quite successful. The students take part on the programs, sometimes two or three research papers being presented at a meeting. Other programs are led by faculty members and outsiders. Open meetings, to which the public is welcomed, have been held successfully. At one of these there were more than 300 in attendance. Recently it has been planned to have active discussion led by some experienced man on certain aspects of biological science.

Mu chapter has 233 members, four of whom are honorary. There are now 36 active members, some of whom take only a passive while others take a very active interest in the organization.

NU

Edward M. Weyer, Jr.

Surely all members who were present at the recent conven-

tion have come away with the conviction that Phi Sigma with a convention is an entirely different organization than she would have been without a convention and that Phi Sigma after the convention is far different from what she was before.

“By the convention loose links which have previously existed in the government of the society will undoubtedly be strengthened. Nu chapter also sincerely hopes that new links may be added to our chain of chapters by the addition of desirable organizations.”

OMICRON

Irene Pritz.

Omicron Chapter consists of eleven active members. Such members are Juniors, Seniors, and Graduates. Several of the members are Student and Graduate assistants in the Biology department and are thus closely connected with biological work. We elect our members from the College of Liberal Arts and the School of Medicine.

The meetings are held monthly in the Biological Lecture Room. Programs consist of talks by active members and instructors in the departments of Biology, Botany, Physiology, and Bacteriology. In these talks by active members, they give a review of the progress made in their research problems. Discussions by departmental heads deal with the latest experiments pertaining to their particular fields.

Elections of new members are held three times during the school year. A banquet precedes every initiation. At the close of the year, when new officers are elected for the coming school year, the occasion is marked by an outing at some of the picnic grounds along the Red River.

Although Omicron Chapter is very new, the members show marked interest in the fraternity and the purpose for which it exists. There is a hearty co-operation among all members and the various departments of the allied sciences which Phi Sigma represents. Not only are we interested in the local chapter but also eager to do our share for the betterment of the Society as a whole.

XI

Edgar C. Tullis

“The work accomplished at the convention in such a very short time shows the degree of cooperation which existed between

the delegates and the NATIONAL COUNCIL. The convention helped to draw the chapters into a united whole. The convention to come will, I am sure, draw the chapters into closer cooperation among themselves, and with the Council."

OUTLOOK AUGURS BRIGHT FUTURE

New Pi Chapter Said to be "Live Bunch"

Emory Petition Wins; Illinois Approved

Because of the Christmas season and the concurrent mid-year vacation, several members of the Biological Club of Emory University petitioning for a chapter of Phi Sigma were unable to be present; also the installing officer was so pressed for time that several features which ordinarily accompany such proceedings were elided.

At noon, January 3, 1925, nine members of the petitioning body met in the auditorium of the Biological Building to be initiated into the ranks of Phi Sigma society. The ceremony consisted of a preliminary lecture by the installing officer setting forth carefully the aims, desires, aspirations and benefits to be derived and, as far as possible, to be lived up to by each and every member. Also the value of the getting together of people of similar trend of thinking, in a social way.

After the ceremony the letter from the national secretary was read congratulating PI chapter upon her patient waiting and persistent effort before finally receiving full recognition and the coveted, as well as thoroughly deserved Phi Sigma Chapter. If the members of the group who were initiated augurs aught, Phi Sigma may well be proud of her new chapter, PI. "The men are a live bunch, full of enthusiasm, and will be heard from in the near future."

ILLINOIS APPROVED

Details Arranged for Coming Installation

All formalities have been completed for the installation of a new chapter of Phi Sigma at the University of Illinois. This will be known as *Rho Chapter*. The secretary is Mr. Edward Devereux, Department of Bacteriology, University of Illinois.

CHAPTER REPORTS

ZETA

Initiates Wisconsin's President But Then

LECTURES by Dr. W. S. Marshall on "The Social Life of Insects", and by Dr. E. J. Kraus on "Some Aspects of Graduate Work" were given at open meetings of the Zeta Chapter during the fall months.

Several business meetings were held and, as a result of the activities of the members, on December 18th twenty candidates were initiated into active membership at a banquet in the Crystal Room of the Lorraine. The occasion was more than ordinarily interesting because the chapter initiated into honorary membership Dr. E. A. Birge, President of the University. In his speech of introduction National Vice-President Noland emphasized the deep interest the University President has always kept in his favorite lines of zoological research in spite of his administrative duties. In his reply Dr. Birge told of his early days in the Cambridge laboratory of the great Agassiz where so many of the nation's biologists received their first impulse to scientific careers under the direction of the "Father of American Biology".

Since last June there has been quite an exodus of Zeta Chapter either into the scientific departments of schools in the country, or into research laboratories. W. A. Kenyon has gone to Hamline, St. Paul; Harvey Smith to the University of Wyoming, Laramie; J. G. McKee to Mississippi A. & M.; G. B. Durham to Connecticut Agricultural, Storrs; E. Dopp to the University of Minnesota; E. J. Kohl and B. E. Pontius to Purdue; R. B. Streets to Arizona Exp. Sta., Tucson; M. Walker to the Tropical Laboratory, Cuba; H. W. Rickett and A. E. Murneek to the University of Missouri; and Abraham R. Saunders to the College of Agriculture, Potchefstroom, Transvaal, South Africa.

Hugo Albertz is on leave of absence at the University of Illinois where he is completing the experimental part of his research.

Beta Chapter's loss was Zeta's gain when Dr. D. V. Baxter and Norman Cameron came to Wisconsin. Dr. Baxter is instructing in botany while Cameron is occupied in a like capacity in Psychology.

H. W. Mossman took unto himself a wife last summer in the person of Miss Ruth Jackson of Columbus, N. J. Mossman has gone over to the Wisconsin University Medical School as Instructor in Human Anatomy.

Beta Chapter of Sigma Delta Epsilon, The Women's National Scientific Sorority, was entertained by Zeta Chapter on February 12th. Professor George Wagner of the Zoology Department spoke on "Wisconsin Bird Life".

Dr. E. M. Gilbert, of the Botany Department and one of the charter members of Zeta Chapter, will have leave of absence during the second semester in the east. He plans to work in herbaria in Washington, Philadelphia, New York and Cambridge on the Clavarias and the Tremellas.

ANSELM M. KEEFE, *Secretary.*



THETA

Michigan Aggies to Hold "Open House" Membership Drive Expected

THETA chapter has held its regular monthly meetings this year. Those in attendance, though not as many as we would like to have had, were always very enthusiastic and took considerable interest in the meetings.

At the first meeting of the year, held on October 23rd, Mr. W. B. Jones of the Dairy Department gave a very timely talk on "The relative Availability of Calcium and Phosphorus from Raw Rock Phosphate and Bone Meal." Mr. Jones has just completed his advanced work for a Master's degree and is well informed along this line. This proved to be a very interesting topic for discussion, and questions by the members brought out some very instructive information on the subject.

The November meeting was given over to a discussion of the proposed national convention and the election of a delegate. The society voted favorably on the questions submitted by the National Secretary; also on the petition submitted by a chapter which has recently been admitted to the fraternity.

At the next meeting held on December 17th, the following men were initiated into the society as active members: George A. Branaman, B.S., Graduate Student and Instructor in Animal Husbandry; James H. Mullen, B.S., Graduate Student in Dairy Husbandry; George S. Schilling, B.S., Graduate Assistant in

Bacteriology; Everett C. Scott, B. S., Graduate Assistant in Dairy Husbandry; Floyd B. Sholl, B.S., D.V.M., Assistant Pathologist; Forest C. Strong, B.S., Graduate Assistant in Botany; Melvin B. Hoffman, B.S., Graduate Assistant in Horticulture; Gordon R. Schlubatis, B.S., Graduate Assistant in Soils. The meeting adjourned to the Hunt Food Shop where a banquet was served in honor of the recently initiated members.

Dr. R. H. Hunt, acting as toastmaster, introduced the speaker, Mr. Edgar Cochram, Secretary of the State Conservation Commission, who gave a very interesting and instructive talk on the many phases of that department. He brought out very forcibly the need of conservation of our national resources and discussed some of the methods used by this state in accomplishing the work. This subject, unlike many that are often discussed, is of vital interest to everybody, whatever their specialty may be.

At the last meeting up to the time of this writing the Chapter heard the report from the national convention, given by Mr. F. W. Fabian who represented Theta chapter at this meeting. In expressing the sentiments for Theta Chapter on the constitutional changes it can be said that each of them received our stamp of approval. We were especially glad to see great emphasis laid upon research and the requirement that new members in the future must have shown special interest in research work. The stand we take is evidenced by the fact that this chapter limits its members to those who have completed their undergraduate work and are actively engaged in research.

At present this chapter is making plans to hold an "open house" about the first of March. All post-graduate students and members of the faculty who are doing scientific research along biological or closely related lines will be invited. Dr. Butterfield, President of the College, will talk on some scientific subject. He will also outline the program of this college for experimental work. The purpose of this meeting is not only to boost Phi Sigma and get new members but to renew our interest in research work and to learn what we can about the work which is carried on here. It is hoped that such a meeting will prove very beneficial.

W. J. ROBERTS, *Secretary.*



IOTA

Washington University Biologs Support Scholarship Mention of a Commendable Program

IOTA Chapter has been very much alive and alert this year. At the first meeting the general policies for the present year were announced, i. e., to begin meetings promptly and to carry them through in a businesslike manner; to make the refreshments simple enough so that there is no necessity for anyone's absence during the program; to make every other meeting a report of individual research problems and to alternate with discussions of general subjects, as for example, "*The status of our own University and its departments in the educational world*", "*Biological Stations in the United States*", "*American Scientific Societies and their Journals*", etc. As a result our meetings have been much more interesting for all of us. We think that membership in IOTA this year has meant more to the new members and to the chapter than ever before. Our ranks have been swelled to include thirty active and fourteen faculty members with one associate and one honorary member. This we believe has not been achieved through the sacrifice of our high scholastic standards and the feeling that those initiated will become efficient fellow workers in the field of research. Our attendance has been unusually good.

One entire meeting was given to the report of our delegate to the convention. The evening ended with a series of earnest debates on issues concerning the general welfare of our society as a whole, in which the round of all members present was perhaps made.

Just at present we are planning a "movie" benefit to raise our quota for the scholarship fund supported by IOTA chapter.

MRS. EDGAR ANDERSON, *Secretary*.



LAMBDA

Proposes Social Events at Kansas City Convention

LAMBDA Chapter was well pleased with the work accomplished at the national convention. Miss Kathryn Reynolds, in discussing the convention at our last business meeting, suggested that more publicity be given it and that each chapter receive more definite information regarding the details of the convention in order that the delegate might be better in-

formed. She also suggested that one chapter be made responsible for the social meeting and that the same chapter act as host to the visiting chapters. The chapter as a whole feels that it would be profitable to meet for several days. This would allow the delegates more time to become acquainted and would permit them to learn more of the work that is being done by the various chapters. Miss Catheryn McRae resigned as secretary and treasurer. In accordance with the amendment regarding the separation of these offices, Miss Gertrude Pease was elected treasurer and Miss Esther L. Larsen, secretary.

Two of our faculty members, Dean T. C. Spaulding of the School of Forestry and Dr. J. E. Kirkwood, head of the Department of Botany, attended the meetings of the A.A.A.S. Dean Spaulding attended the meetings as official representative of the State University of Montana. While on his trip east Dean Spaulding visited the universities at Ann Arbor, Madison, and Syracuse, taking special note of the work being done in connection with forestry. Mrs. Spaulding, also a member of Lambda Chapter, accompanied him.

Dr. J. E. Kirkwood, while on leave of absence from December 1, 1924 to January 10, 1925, visited the Boyce Thompson Institute for Plant Research at Yonkers, the New York Botanical Garden, Columbia University, and the Universities of Ohio, Indiana, and Illinois, delivering three lectures at the University of Illinois. While in New York he spent some time in library and research work. He also delivered two papers at the A.A.A.S. meetings, one before the Ecological Society of America, entitled "Ecology of the Bitter Root Mountains"; the other before the Botanical Society of America, entitled "The composition and behavior of *Lewisia redivivia*."

Dr. Morton J. Elrod will serve this coming summer as Park Naturalist in Glacier National Park.

Mr. H. G. Owen will be instructor for the summer term at the Biological Station of the University of Washington, at Friday Harbor.

Mr. Fred Stimpert will continue his work as instructor in the Biology Department of the University of Montana for the summer term.

Our meetings this year have been largely business meetings, though several lectures of biological interest have been presented before the Chapter. At the last meeting, which was social, the Chapter entertained for the juniors and seniors interested in the biological sciences.

ESTHER L. LARSEN, *Secretary*.

NU

Program Committee Wide Awake Another Open House

NU CHAPTER, under the leadership of its president, Mr. W. A. Hoerr, is passing through a very successful year. Also, if I may act as a prophet, NU is going to continue to be successful in the future, according to the present outlook. Mr. Hoerr, with the kind cooperation of Dr. G. W. Martin, head of the Biological Department here, and Mr. C. D. Dieter, an Instructor in the Department of Biology, has been able to formulate a plan by which very successful meetings are being held and at which most interesting subjects have been discussed. An interesting feature of the meetings is the open discussion which follows each of them. Some of the subjects discussed so far are as follows:

1. "Taxidermy" as given by Akeley in his work of the same name, discussed by Mr. E. M. Weyer, Jr., who brought forth the significance of taxidermy as related to biology.

2. "Sex Determination and Birth Control in Antiquity", presented by Mr. A. L. Sismondo, proved to be quite amusing since it contrasted the ridiculous ideas and imaginings of the ancient thinkers with the more scientific ideas of present day scientists.

3. "The Geology of Petroleum". This subject was given by Mr. R. Dunn; a very interesting talk on the relation of the southwestern Pennsylvania oil fields to the geological structures of that part of the state. The material for Mr. Dunn's talk was the result of his own personal observations in the oil fields. It so happens that NU chapter is situated in the center of this region.

4. "A Synopsis of the Darwinian Theory". This discussion commanded great attention. Dealing with the Darwinian principles still accepted by science to-day, it also discussed a few of those now disregarded. This paper was well given by Mr. R. O. Scott.

5. "The Significance of Food Supply in the Larval Development of Fishes." This treatise was ably given by Mr. E. E. Croushore. He quoted statistics which showed that the larva of fishes developed better under artificial conditions than in their natural environment.

6. "Social Habits of the Termites". This subject, discussed by Mr. R. B. Rush, contrasted the social life of the termites with that of human beings.

NU Chapter reports favorably on all the business transacted at the convention in Washington, and wishes to extend its greetings to all the elected officers and especially to Professor C. I. Reed, assuring him hearty cooperation in carrying out all his future policies.

NU Chapter expects to hold an open meeting, addressed by a prominent speaker, in the near future.

AUGUST SISMONDO, *Secretary*.



OMICRON CHAPTER BUSY IN NORTH DAKOTA

SINCE our last report we have had several interesting meetings. At the November meeting we elected our delegate, John Schauer, to the Washington convention. At this meeting Laura Dinkel, a senior in the School of Liberal Arts, who is also doing research; Reginald Smart, a senior in the School of Medicine; and Frank Jenkins who is Assistant in the Department of Physiology in the School of Medicine, were elected to membership. Ralph Finkle and John Schauer presented a report on experiments on "Decerebration and Decerebellation of the Cat and Pigeon". They demonstrated their paper with a pigeon from which the cerebellum had been removed.

At the December meeting the newly elected members were initiated after a banquet held at the University Commons. Dr. Baird, Ralph Finkle and Monte Shunk gave short talks. The initiates were called upon for extemporaneous speeches.

The program of the February meeting consisted of a report and discussion of the convention, led by our delegate, John Schauer. We are pleased with the revision of the constitution, as we have felt that a more unified organization was desirable. We appreciate the work that Dr. Reed has done for Phi Sigma and we wish to assure the NATIONAL COUNCIL that in future we shall do all in our power to cooperate with the National officer in every possible way.

Many of our members are doing research work. Monte Shunk is working on "Comparative Histology of Bird Thyroid and Suprarenal Glands"; Frank Jenkins on "Surgican Pathology and Bacteriophages"; John Schauer on "Effect of Chemical Environment on Cell Tissues"; Lester Guss on "The Use of Di-Bromo-Thymol-Sulphonphthalein as an Indicator in Determining Hydrogen Ion Concentration". Laura Dinkel has decided that "Influence of Alcohol on the Nerve Cells of the White

Rat'' is a very suitable problem indeed. The germination of Sagittaria seed is keeping Irene Pritz, our botanist, busily engaged.

Of our alumni there are those who are instructing in the class room. R. E. Fugelstad is training students in the art of military science at Wentworth Military Academy, Lexington, Mo. Mildred Gjere, in Kemmerer, Wyoming, is also teaching. Mildred Smith has stayed nearer home and is teaching in Wahpeton, N. Dakota. Others are in other universities, A. H. Borgerson, R. Kousky and C. F. Reichelderfer at the Northwestern University Medical School, and E. A. Lodmell at Minnesota University.

IRENE PRITZ, *Secretary.*



XI

Strong Demand for Botanists at the Nebraska Chapter

XI CHAPTER of the University of Nebraska has enjoyed a very successful season so far in 1924-25. The interest of all the members has been well maintained and the chapter looks forward to even greater activity during the remainder of the school year. Quite a number of papers have been presented at the various meetings of the society, and all have attracted considerable interest. In fact this feature of the society's work is becoming more and more interesting to the members. The program committee has been busy and has papers by several of the members lined up for meetings in the near future. The local chapter holds its meetings twice a month and considerable time is thus available for discussion of the topics presented.

On February 5, 1925, Edgar C. Tullis gave his report of the proceedings of the national convention. There seemed to be no objection to the changes made in the constitution and everyone seemed well pleased with the work of the convention.

Among the fifteen new members elected this season, the following three are faculty members who have distinguished themselves in various lines of work: Dr. H. H. Waite, head of the Bacteriology Department; Dr. J. E. Weaver, plant physiologist, who gave one of the invitation papers at the recent Washington meetings; and Dr. George L. Peltier of the Department of Plant Pathology.

RAYBURN SAMSON, *Secretary.*

KANSAS CITY—GOAL FOR 1925

Check, Cheer, and Choose
Beg, Buy or Borrow It.

All HAIL to the "Show Me" state and straight to the "Heart of America". It is said of this convention city that they have no key to give you, that their gates are always open to visitors and especially to you, fellow scientists in Phi Sigma.

You are welcome then to this delightful city and don't fail to chalk it in RED upon your calendar of important events NOW.

KANSAS CITY, DECEMBER 28, 1925.



OFFICERS

ROBERT L. MCDONALD,
Vice-President of Council,
S. J. WESTBROOK,
Vice-President

ALBERT E. CLARK,
Vice-President,
HENRY L. ADOLPH,
Council

W. E. SYMON, Manager

TELEPHONE, MAIN 6000

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P. B. HEATH,
CUBEL LECHMAN,
C. E. WILSON

P. B. HEATH,
HARVEY J. SCHMIDT,
GUT C. TULLER

CONVENTION COMMITTEE

WILLIAM L. ALLEN,
J. H. BARNETT,
J. H. BARNETT,
J. H. BARNETT,
J. H. BARNETT,
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March 4, 1925

Mr. Everett F. Davis, Editor
The Missouri Botanical Garden
St. Louis, Missouri

Dear Mr. Davis:

I certainly appreciate your letter of March 4 in reference to the Phi Sigma Society, national biological fraternity.

We are glad to take this opportunity of issuing to your entire membership a cordial invitation to attend the convention this year in connection with the American Association for the Advancement of Science to be held in Kansas City beginning December 28, 1925. We have already started plans to prepare for this gathering and within a few days expect to have all meeting places arranged for and also a complete outline as to other services and facilities that will be necessary.

We are expecting several thousand visitors to the convention this December and you can rest assured that no stone will be left unturned to give them one of the finest conventions they have ever held.

Sincerely yours

[Signature]
W. E. Symon, Manager
Convention Bureau

WES:J

INFORMATION BUREAU MAINTAINED AT UNION STATION IN WEST LOBBY—TELEPHONE GRAND 2781

MEMBER INTERNATIONAL ASSOCIATION OF CONVENTION BUREAUS

PASSING THE BUCK!

The COMPASS has been received at the Editor's desk not once but several times. Not that I care a darn but how about it, Sigma Gamma Epsilon, how do you do to speak of coal and oil under the same cover?

For all, I have enjoyed the brief rest from my work, and your good paper remains on my desk where I shall not hesitate, whenever I feel so inclined, to push back in the embrace of a swivel chair and wish that you might come again.

"Fraternalism": Does it Mean the Same for You and for Me?

In an article published for THE ALPHA OMEGAN, appearing last December, Dr. M. M. Fintz has succeeded so well in an attempt to convey to the Alpha Omega, dental fraternity, an analysis of some of the principles behind our inborn desire to fraternalize, that we have considered it well worth while to embody it entirely in this issue of THE BIOLOGIST for your enjoyment.

Cicero, the great orator of ancient Rome, said: "There is no such thing as happiness, health or progress without friendship."

The beauty with which we adorn our friends and the virtues which we extoll in them will at last react upon us and become our own.

Nature in her evolution of man seems to be searching for an ideal, even though at times she hesitates and an apparent reversion takes place, as in the recent European conflict.

But it is certain that we will at some time arrive at a higher plane of knowledge and morality when the brotherhood of man will become an accomplished fact.

I often feel that the world is waiting for a leader, a man who is wide enough and strong enough to bring unity and peace to a world divided against itself, one who can bring love and fraternalism out of the chaos of strife and hate.

Fraternalism is one of the brightest stars on the dark and troubled waters of existence. What a dreary place this world would be if we had no true friends whom we could trust, friends who will make sacrifices for us, who will protect our good name and defend our character, who will fight for us if necessary.

One of the earliest fraternal organizations of which we have any knowledge was the celebrated brotherhood formed by the Greek philosopher Pythagora in the sixth century B. C. This brotherhood was composed of the philosophers and reformers of the period.

Even before this, investigators have shown that freemasonry was originally a fraternity of practical builders, architects and artificers.

The Phoenicians, whose capitol cities were Tyre and Sidon, were the early patrons of that semi-religious mystic fraternity known in history as the Dionysian architects. That this fraternity was employed by the Tyrians and Sidonians in the erection of costly temples to unknown deities, in the building of rich and gorgeous palaces and in strengthening and beautifying their cities is universally admitted. That they were the cunning workmen sent by Hiram, king of Tyre, to aid Solomon in the erection of the temple on Mount Moriah is scarcely less certain. Their presence in that city at the time of the building of the temple is the evidence of history. Hiram, the widow's son to whom Solomon entrusted the superintendence of the workmen as an inhabitant of Tyre and a skilled and curious workman, was doubtless one of their number.

The Dionysians were sent by Hiram, king of Tyre, to assist King Solomon in the construction of the home he was about to dedicate to Jehovah, and they communicated to their Jewish fellow-laborers a knowledge of the advantages of their fraternity and invited them to a participation in its mysteries and privileges.

The Jews were neither architects nor artificers. Solomon himself admits that. Solomon, therefore, unable to find builders of superior skill for the execution of his plans in his own dominion, engaged Tyrians, who, together with the Jews, were contented in performing the inferior labor in finishing the stupendous edifice.

Fraternity is the watchword of the present age. The human race is drifting toward brotherhood. Born amid the strife of prehistoric man and purified by the flames of the French Revolution the deathless principle lives on, wrapping itself in benediction round the destinies of man and finding its home in the bosom of the everlasting God.

All the forces of history, religious, industrial, political and social, are drawing and binding man together. Never did the human heart know a broader, a deeper fraternal feeling. The statesman of today is circumscribed by national boundaries. To-

morrow he must burst these narrow limits and bask in the sunlight of international fame. Nothing better portrays the spirit of this present age than its philanthropy. Philanthropy, the white-winged angel of mercy, has come to relieve the distress, to dispel the darkness from the dismal abodes of poverty and vice, to educate and enlighten the benighted souls of every land, and above all, to teach mankind a broader benevolence, a sweeter charity, a more comprehensive love. Man is pre-eminently a social being. His social nature is the result of the interaction of all his separate and distinct natures. It consists in a balance of faculties. The industrial nature, the political nature, and the intellectual and religious natures are only the brick and mortar out of which the social nature is constructed.

Man's industrial relation is his relation to the means of physical existence; his political relation is his relation to government and law; his intellectual relation is his relation to truth; his religious relation is his relation to his own actions; but his social or fraternal relation is the highest one possible. Manhood is the basic principle and love the binding force of fraternalism. Grounded on such lofty principles, what may we not reasonably expect from the spirit of fraternalism? It embodies all that is best, all that is noblest in the distinct nature of man.

The spirit of fraternalism is the common property of the world. It makes us more useful and more capable of enjoyment no matter what sphere of life we occupy. Everywhere you turn the voice of cordial greeting sounds in your ears and the warm hand of brotherly love is extended.

Surely the potent power which has brought about this condition is one of heaven's most priceless gifts to mankind.

The primary function of fraternalism is to bring together men with kindred interests, thoughts and ideals, so that they may enjoy each other's society and gain mutual benefits. They are banded together with the object that each individual may lend to the entire group the elements of strength and the talents which he possesses and may in turn receive the help, inspiration and protection of the whole organization.

Fraternalism is to be valued for what is in it and not for what may be gotten out of it. When two or more persons unite for purely material benefit, that union is not a fraternity, but an association for the purposes of business. But the vital and emanating principle of true fraternalism is the element of brotherly love, sympathy and co-operation; the ability and willingness to sacrifice to the good of the whole some of the personal interests which may be at variance with the interests of the whole organization.

The power of fraternalism lies in concerted action. Without unity and co-operation there can be no progress. In no previous period in the history of mankind has the power of united action meant so much as now. The tremendous expansion of industrial combination, the great aggregation of capital, the increasing tendency to form clubs, societies and organizations for specific purposes, and most insistent of all, the demand for a federation of nations; all these demonstrate the growing conviction that in concerted action alone lies the power of making the effect great and results enduring.

When God, in His eternal counsel, conceived the thought of man's creation, He called to Him the three ministers who wait continually upon His throne—Justice, Truth, and Mercy—and thus addressed them: "Shall we make man?"

Then said Justice: "Oh God, make him not, for he will trample upon the laws".

Truth made answer also: "Oh God, make him not, for he will pollute the sanctuaries".

But Mercy, dropping upon her knees and looking up through her tears, exclaimed: "Oh God, make him and I will watch over him with my care through all the dark paths he may have to tread."

Then God made man and said to him: "Oh Man, thou art the child of Mercy; go and deal with thy brother."

In considering the nature of human brotherhood, let us inquire into the motives of fraternal organizations. The first of these is based upon common suffering. There is an element of permanence in that friendship that springs up between those who have undergone the same hardships, endured the same pangs, and eaten alike of the bread of sorrow. Nature has formed the fraternity of the poor.

The second motive for fraternal organization is common interest. The third motive of organization is common belief. Belief is one of the strongest grounds for fraternal organization. The fourth motive is love. A heart that loves is a heart in tune with nature and with mankind.

The fraternity of love asks neither for wealth nor rank nor worldly conditions, but only for a heart in tune with nature, a heart that loves its fellow-man.

With mutual help will come mutual growth, a widening faith, increasing confidence, enduring patience, unselfish ambition, and affection which will bear the test of time and trial.

Thus shall the nations of the earth enter into a universal brotherhood which shall fall upon the race like the beautiful shadows of evening spreading and growing till life and its light pass away.

A LOOK FORWARD

Letter from Secretary A. A. A. S. and Reply
Disclose New Fields of Endeavor

"Dear Mr. Reed:

"I have meant to write you a reply to yours of January 13, and have just got to it. We like to have every organization meeting with the Association represented in the reports published in SCIENCE after the meeting. It is quite all right to include reports of business sessions and I think your report is very interesting for scientists in general. Thank you for sending it. Although it turned out that I was unable to include the society reports in the special issue of SCIENCE for February 6, yet those reports will appear later.

"I want to say to you that it seems to me that the Phi Sigma plan for junior sessions, etc., is a very promising one. I wonder if anything along such lines might be undertaken for the A.A.A.S. annual meetings. I suppose that some sort of good motion pictures with proper talk might be arranged for school children. Your people have probably been thinking a good deal along these lines and that is why I am asking you what you think.

"We wish to improve the annual meetings in many ways, among which is the popularization of science and the bringing of the people more closely into touch with what science is doing and trying to do.

"With best wishes,

Yours very sincerely,

BURTON E. LIVINGSTON, *Permanent Secretary.*"

"My dear Dr. Livingston:

"I have your letter of February 10 and note your explanation regarding your report of the meeting of Phi Sigma.

"In reply to the question you raised regarding our plans for the junior activities, I will say first that as soon as the revised constitution is printed I will have a copy sent to you for examination; also a copy of THE BIOLOGIST, our publication. I think, however, our idea of a junior section is perhaps somewhat different from your own. We have felt for some time that there

is a stage in the career of most students when they are more or less at a loss for a definite scientific affiliation that will provide them with a medium of expression. Many students acquire a desire for a research career in biological sciences very early, and, while in a general way it may be desirable to have a long routine preparation, or even necessary before they can attain a high degree of efficiency, nevertheless we feel that at this stage most of them are very uncertain as to the future disposition of their careers and are usually wavering between a purely scientific career and some other line of activity. Phi Sigma aims to give these people a medium of expression in that it provides a meeting place where they may go and present any original investigation, no matter how elementary. Our affiliation plans, then, constitute an enlargement of this idea in that we plan to have in conjunction with our annual convention next year a scientific program at which papers will be presented by active members of our organization who, in most instances at any rate, would not be eligible to present papers in other sessions of a more advanced and more technical type or, even if they were eligible, most of them would hesitate to present papers because of the elementary character of the papers themselves and because of their timidity in attempting to speak before audiences such as convene in most of the sessions. We have felt that the lack of an opportunity to present work constitutes a distinct deficiency in the educational side of our scientific work. On the other hand, if a student can come before a group of approximately the same degree of development and present there his own investigations, no matter how elementary they may be, that student's interest is certainly going to be crystallized about the immediate problem. Anyone with experience in promoting research work knows that this is a fundamental necessity in arousing the student's interest. We believe, then, that Phi Sigma fulfills this need and that such is the main function of the organization. I will, however, take up with the other officers some other ideas that occurred to me on reading your letter, and we will communicate with you a little more fully after conferring on the matter. In the mean time, thank you for bringing this to our attention.

Sincerely yours,

C. I. REED, *National Secretary.*"

REPORT OF THE NATIONAL TREASURER

The following report covers the period from June 1, 1924 to January 1, 1925.

General Fund

Receipts:

Cash on hand June 1, 1924	\$114.46
Received for initiation fees and sale of blank forms	124.50

Total \$238.96

Expenditures:

Printing	\$ 50.00
Chapter installation	50.00
Expenses of the National Secretaries office	116.85

Total \$216.85

Balance on Hand January 1, 1925 \$ 22.11

Biologist Fund

Receipts:

Cash on hand June 1, 1924	\$287.01
Received from G.A.A. No. 3	346.00
Received from Biologist subscriptions	2.00

Total \$635.01

Expenditures:

Printing Vol. 6, No. 2 of the Biologist	\$ 79.50
Postage	3.85

Total \$ 83.35

Balance on Hand January 1, 1925 \$551.66

Key Fund

Receipts:

Cash on hand June 1, 1924	\$111.36
Received for the purchase of keys	401.50

Total \$512.86

Expenditures:

Paid jeweler for keys	\$360.00
Postage	8.83

Total \$368.83

Balance on hand January 1, 1925 \$144.03

Convention Fund

Receipts:

Transferred from key fund	\$144.03
Received from the chapters on convention assessment	639.00
Total	\$783.03

Expenditures:

Paid to officers and delegates for R. R. fares	\$986.87
Deficit	\$203.84

ERWINE HALL STEWART, *Nat. Treasurer.*

KEYS

Standard Size (official)

Swivel ring top	\$5.50
Stationary ring top	5.00
Mounted as a pin	6.25

Miniature Size (small)

Swivel ring top	\$5.00
Stationary ring top	4.50
Mounted as a pin	5.50

When ordering always be sure to state the name of the member for whom the key is ordered, the chapter to which he belongs and the year of his initiation. Last but not least, send **ALL** orders to the National Treasurer.

Both sizes of the membership record blanks are sold at two cents each. This price does not entirely pay for the cost of printing and mailing.

Membership Certificates are issued by the National Secretary without any charge being made, while the membership record blanks are distributed by the National Treasurer. Order accordingly.—E. H. STEWART, *National Treasurer.*

THE FIRST PHI SIGMA CONVENTION

A Milestone in Our Progress

This convention in Washington, D. C. December 29, was characterized by the enactment of a large amount of constructive legislation. Serious deliberation on the floor, with spirited

and earnest debate, commingled with a fraternal feeling for cooperation and personal sacrifice for the good of the whole was in evidence throughout the entire session.

When President Cutler rapped for order at ten o'clock there was assembled before him a very representative group of college men and women delegates from their respective chapters. From this moment the future unity of our society, the perpetuity of her ideals was assured. It will be noticed that in the revised constitution of this society which follows there are embodied many changes becoming to the dignity of that document and our society.

CONSTITUTION OF PHI SIGMA SOCIETY

Historical Note—The first constitution used by the Society was written and printed in 1915 under the auspices of Alpha Chapter. The second printing of the constitution was in 1917 under the direction of the Grand Chapter. The third printing was under the direction of the Central Governing Body in 1919, as the revision made by Beta Chapter as a committee on revision, was in that year adopted by all the chapters active at that time. With the addition of some slight amendments another issue was authorized by the Central Governing Body in 1923. This issue with revisions was authorized by the first convention in 1924.

PREAMBLE

Recognizing the necessity of and the mutual benefit to be derived from an organization devoted to research in biological sciences, and a careful investigation into and free discussion of the same:

We agree to form an association, and for its government to adopt the following constitution and by-laws:

ARTICLE I

Name and Object

SECTION 1. This association shall be known as the Phi Sigma Society.

SECTION 2. The object of this society shall be to promote interest in research in the biological sciences.

ARTICLE II

Government

SECTION 1. The government of this society shall be vested in the National Council, which shall consist of the President, Vice-President, Secretary, and Treasurer.

SECTION 2. (a) Any member of any chapter of Phi Sigma Society shall be eligible to any office designated in Section 1 hereof, provided he has fulfilled all obligations to the society.

(b) Candidates for national offices shall be nominated from the floor at a regular session of the convention hereinafter provided for. Elections shall be by written ballot, a majority vote being required to elect. However, it shall be understood that at the convention to be held in 1926, the offices of Vice-President and Secretary shall become vacant. (NOTE: This means that the present Vice-President and Secretary shall hold office two years only, instead of four).

(c) National officers shall be elected for a term of four years, except as noted in Clause (b) hereof.

(d) Any vacancy occurring in any national office shall be filled by appointment by the Council. The newly appointed officer shall hold office until his successor is duly elected.

SECTION 3. (a) The duties of the National Council shall be as follows:

1. To investigate personally all bodies petitioning for the establishment of new chapters and to recommend action by the chapters.
2. To ratify the selection of honorary members recommended by the chapters.
3. To take necessary disciplinary measures against chapters or individual members in accordance with constitutional provisions.
4. To provide for the holding of conventions as hereinafter authorized.
5. To provide for the publication of the official organ, which shall be known as **The Biologist**.
6. To decide all matters affecting the welfare of the Society as a whole not otherwise provided for in the constitution and by-laws.

(b) The duties of the National President shall be:

1. To issue proclamation calling for a convention as hereinafter provided for.
2. To be responsible for the installation of new chapters as authorized.
3. To preside at conventions and Council meetings.
4. To undertake such other duties as concur with parliamentary procedure.

(c) The duties of the Vice-President shall be:

1. To confer with other members of the Council on all propositions affecting the welfare of the Society.
2. Such other duties as concur with parliamentary procedure.

(d) The duties of the National Secretary shall be:

1. To keep a record of all business transactions of the National Council.
2. To maintain an official register of all members of the Society.

3. To provide and issue membership certificate forms to the chapter secretaries as required, but no certificate may be issued until the initiate's full record is filed in the National Secretary's office by the chapter secretary.
4. Prior to the expiration of his term of office, he shall publish in printed form an official account of the proceedings of the Council, including the official report of the Treasurer, for the same period, and shall give a list of all chapters with complete membership rolls.
- (e) The duties of the Treasurer shall be:
 1. To receive all moneys due the national organization and to pay out same on proper authority from the Secretary.
 2. Prior to the termination of his period of office to render to the Secretary an official report of all financial transactions occurring during his period of office.

(f) A three-fourths vote of the Council shall be necessary to pass any motion or adopt any procedure which may affect the Society as a whole.

A three-fourths vote of delegates assembled in convention shall be necessary to pass any motion or adopt any procedure which may affect the Society as a whole.

A three-fourths vote on any measure placed in a referendum before the active chapters shall be necessary for its adoption.

SECTION 4. Convention. (a) Beginning with the year 1924 A. D., a national convention shall be held every two years in conjunction with the annual meetings of the American Association for the Advancement of Science. Each chapter shall be entitled to representation by one delegate or alternate duly chosen by the chapter from its active membership and certified by the chapter President and Secretary.

(b) A special convention may be called by the National Council at any time when approved on referendum by three-fourths of the active chapters.

(c) Such convention shall be empowered to transact any and all business relating to the welfare of the Society as a whole.

ARTICLE III

Chapters

SECTION 1. An active chapter may be established in any institution of learning which requires for graduation the equivalent of four years of collegiate work and which is equipped with facilities for research in biological sciences. Such chapter shall be established upon approval by three-fourths of the active chapters upon recommendation of the National Council.

SECTION 2. Active chapters shall be designated by institutional names accompanied by Greek letters in order of priority, the order to be sanctioned by the National Council.

SECTION 3. Each Active Chapter shall have the power to regulate all matters pertaining to local affairs for which provision is not made in this Constitution and By-Laws.

SECTION 4. An Alumni Chapter may be established at any place other than an institution of learning upon the written application of

not less than ten alumni members who are residents of said place. Such Alumni Chapters shall have no voice pertaining to the society as a whole, but shall be organized only for the advancement of the biological sciences.

SECTION 5. Alumni Chapters shall be designated by the name of some person whose work has been recognized as a scientific contribution to the biological sciences.

SECTION 6. A petition for a charter for the establishment of a new chapter shall be presented to the National Secretary. Upon consent of the National Council, the petition shall be referred to all the active chapters, either by referendum or in convention assembled. Upon affirmative vote of three-fourths of all the active chapters, the President shall issue a proclamation of acceptance, and a charter signed by all the national officers shall be issued by the National Secretary.

SECTION 7. Such petitioning group shall at the time of installation deposit with the Treasurer the sum of One Hundred Dollars. Charter members shall be exempt from any further payment of dues for the remainder of the school year.

SECTION 8. (a) In case any active chapter of Phi Sigma shall be in arrears for indebtedness to the National Treasurer for a period of three months or shall in any other way have violated any obligation to the National Council, the President may of his own will, or on written complaint of any national officer or any active chapter, suspend such chapter for a period of two months, during which time said suspended chapter may have opportunity to correct the error or plead its case.

(b) If on the expiration of that time the suspended chapter has not fulfilled obligations or presented proof of freedom from blame, the President may, upon a majority vote of the National Council, issue to all chapters, including the suspended chapter, a proclamation of indefinite expulsion, in which case the chapter can be reinstated only by satisfying the requirements of Article Three, Section Six, and then only provided all original obligations pending are first satisfied.

(c) Additional time may be granted upon appeal by the suspended chapter.

(d) Upon receipt of conclusive evidence of violation of any provision of the constitution and by-laws on the part of any member of any chapter of Phi Sigma, the President, upon approval by the National Council, shall notify such member of suspension for two weeks, during which time said member may file with the National Secretary a reply to the proclamation. If satisfactory defense is not made during this period, the National Council shall notify the member of expulsion from the Society. Such accused person must then surrender all evidence of membership in Phi Sigma, including the key, upon penalty of action in Civil Court. Compensation for the latter may be fixed according to sale value thereof. The National Secretary shall notify all chapters of such action.

ARTICLE IV

Membership Eligibility

SECTION 1. The Phi Sigma Society shall consist of active, alumni, faculty, and honorary members.

SECTION 2. Any person of good moral character, being a student enrolled in a College or University, who has shown special ability for research work and who has received an equivalent of at least two years of college credit, of which at least one-fourth is in biological science, shall be eligible to active membership. Students in professional courses must, in addition to their scholastic record, have been engaged in research to be considered eligible for active membership.

SECTION 3. Any active member failing to pay chapter dues shall be placed on the inactive list and shall thereafter not be entitled to vote or hold office or otherwise enjoy the benefits of membership.

SECTION 4. Any member of the faculty of any institution supporting a chapter of Phi Sigma shall be eligible to faculty membership, and as such shall pay a Three Dollar initiation fee, but shall be exempt from all dues and shall not be entitled to the right to vote or hold chapter office.

SECTION 5. Any scientific worker who has achieved eminence in some branch of biological science shall be eligible to honorary membership, and as an honorary member shall be exempt from all dues and assessments and shall have all rights of active members, except to vote and hold chapter office. The honorary members shall be ratified only by the National Council upon recommendation of the chapters. No one chapter shall be entitled to more than one honorary member in any one year.

SECTION 6. Any member changing schools and wishing to become affiliated with another chapter, shall bring affidavit signed by the President and the Secretary-Treasurer of the chapter from which the member comes, showing such member to be in good standing both in the chapter and in his college. Upon presentation of such an affidavit at any regular chapter meeting, the transferring candidate shall be declared a member of the admitting chapter; the status of the former membership shall not be changed by such a transfer.

ARTICLE V

Chapter Officers Election and Duties

SECTION 1. The officers of each chapter shall consist of the President, Vice-President, Secretary, and Treasurer.

SECTION 2. Said chapter officers shall be elected two months before the end of the school year and shall be installed immediately and shall serve during the remainder of the current school year and the ensuing school year or until their successors have been elected.

SECTION 3. Chapter officers shall be elected according to routine parliamentary procedure.

SECTION 4. The duties of the chapter officers shall be such as usually pertain to their respective offices.

SECTION 5. It shall be the special duty of the chapter Secretary to keep a record of all business and correspondence and to preserve all manuscripts and records and to be especially charged with the duty of filing personal records of initiates with the National Secretary, with definite understanding that no candidate's initiation is complete until his or her record is on file and duly acknowledged by the National Secretary. He shall also keep a list of members and

record of all business communications, call the roll of active members at each regular meeting, and render an official report at the last regular meeting of his term of office.

SECTION 6. The Treasurer shall collect and guard all moneys, properties, and securities belonging to the local chapter and shall render an official report of the same at the last regular meeting of his term of office.

SECTION 7. All chapter officers shall be eligible to reelection, providing they rank as active members at the time of such re-election.

ARTICLE VI

Committees and Duties

SECTION 1. The standing committees shall be (a) the executive committee, (b) the membership committee, (c) the program committee, (d) the auditing committee and (e) the banquet committee, all of which shall be appointed by the President with exceptions in Article VI, Sections 2, 3, and 4, at the first regular meeting of the school year.

SECTION 2. The executive committee, consisting of the President, Vice-President, and the Secretary and Treasurer, shall decide the policies of the chapter and shall adjust all financial difficulties or irregularities for which no provision is made in the Constitution and By-Laws.

SECTION 3. The membership committee, consisting of the Vice-President as Chairman, and three active members from as many departments if possible, shall secure the names of candidates eligible to membership and with each name shall obtain necessary qualifications and attainments to justify their selection. The committee shall present these names with recommendations at the meeting for the election of new members as hereinafter provided for. (See Article VIII).

SECTION 4. The program committee, consisting of the president as chairman, and two other active members shall arrange a suitable program for the meetings.

SECTION 5. The auditing committee, consisting of two active members, shall audit and adjust all books and accounts of the chapter and shall make a report on the same at the last regular meeting of the college year.

SECTION 6. The banquet committee, consisting of two active members, shall prepare suitable lunches, etc., for the meetings and shall take general charge of initiation banquets.

ARTICLE VII

Meetings

SECTION 1. Regular meetings of each chapter shall be held at least once every month during the school year.

SECTION 2. The President may call a special meeting at any time and must call a special meeting upon request of three active members.

SECTION 3. Visitors may be brought to meetings, except those at which new members are to be elected.

ARTICLE VIII

Elections and Initiations

SECTION 1. At the first regular meeting of each chapter after November 1 and March 1, the membership committee shall recommend such persons as are eligible. Accompanying the name of each candidate the chairman shall give a brief account of his or her personality, attitude, and attainments. After suitable discussion of each candidate, in which both favorable and unfavorable comment may be made, the committee shall strike out such names as are unacceptable. The chapter shall then proceed to secret ballot. An affirmative vote of at least ninety per cent. of all active members shall be necessary for election.

SECTION 2. The chapter shall then arrange so that each member-elect shall be personally notified of his election and brought to the proper meeting for initiation.

SECTION 3. Initiations shall consist of the reading of the ritual by the President in the presence of the candidates, the signing of the chapter roll, the filing of the membership record and paying the initiation fee. However, initiation shall not be considered complete until the record is on file in the National Secretary's office, nor can the initiate vote or hold office until the initiation is complete.

SECTION 4. No member may be initiated in absentia. Any candidate for membership who is unavoidably absent on the date of initiation may appear before the chapter at any subsequent meeting and by complying with the requirements as set forth above be admitted to membership.

ARTICLE IX

Amendments

SECTION 1. This Constitution may be amended with the consent of three-fourths of all the active chapters.

BY-LAWS

SECTION 1. (a) The regular initiation fee for active members shall be Eight Dollars, of which Three Dollars shall be paid in to the National Treasury for convention expenses. One Dollar shall be paid to the National Treasury as subscription for *The Biologist*. The remaining Four Dollars shall go to the local chapter. Payment of the initiation fee shall exempt any initiate from further national dues for the remainder of the school year, except assessments levied after his initiation.

(b) The regular initiation fee for faculty members (Article IV, Section 4 of the Constitution) shall be Three Dollars, which shall be paid into the National Treasury.

SECTION 2. The treasurer of each chapter shall collect and pay into the National Treasury the sum of Three Dollars for each active member, the same to be paid on or before the 1st of December of each year. Such dues shall entitle each active member to one annual subscription to *The Biologist*.

SECTION 3. A majority of the active members shall constitute a quorum.

SECTION 4. The active membership at any time shall consist of those active members who have satisfied all requirements of the Constitution and By-Laws as regards dues, etc.

SECTION 5. In all parliamentary rulings not provided for in the Constitution and By-Laws, the society shall be governed by Roberts' Rules.

SECTION 6. The official badge of the society shall be a key with the Greek letters "Phi" and "Sigma" upon it. The letters shall be of gold with the "Phi" superimposed upon the "Sigma." The "Phi" shall be of polished gold and the "Sigma" of Roman gold. The key must be purchased through the official jeweler of the society at the order of the chapter secretary.

SECTION 7. The colors of the society shall be yellow, green, and white.

SECTION 8. The Shasta daisy shall be the official flower of the society.

SECTION 9. The pearl shall be the official jewel of the society.

SECTION 10. The coat of arms of the society shall be a shield divided into four fields, surmounted by a lamp and supported by a banner bearing the Greek words, "Bioulogos." Across the face of the shield proper shall be the letters "Phi" and "Sigma." The original design shall be deposited with the National Secretary.

SECTION 11. These By-Laws may be amended with the consent of three-fourths of all the active members.

PHI SIGMA CHAPTERS FLOURISH IN NEGLECT

Nearly a year ago a request came from the National Secretary to an alumnus interested in a local chapter of Phi Sigma, to accumulate facts regarding the activities of the said chapter. Word comes to the Secretary now that the meeting has just been attended. "I was very much surprised to learn how large it had grown and how much 'pep' and push they all seemed to have.

"They are getting quite conservative in that they have quite a waiting list under consideration and there is a lot of discussion before members are voted in. I understand that only two out of fourteen faculty people were passed, the rest either being rejected or 'laid on the table'.

"When it comes to attendance at meetings about eighty per cent of the members are present at all meetings and the faculty come out for any important meetings, as well as many being present at all meetings."

This bit of information regarding the activities of one of our chapters is included here as an exemplification of the kind of thing that should be observable in every chapter. I wonder if it will be possible for us to say that it is indicative of any chapter of Phi Sigma.

Secretary.

PHI SIGMA SOCIETY NATIONAL CONVENTION

Central High School, Washington, D. C.

December 29, 1924

Alpha: Unrepresented.
Beta: L. E. Wehmeyer.
Delta: Joseph Murray.
Epsilon: G. B. Johnson.
Zeta: Anselm Keefe.
Eta: Adib Karam.
Theta: F. W. Fabian.

Iota: Miss Fanny Fern Smith.
Kappa: Parke T. Woodard.
Lambda: Catherine A. Reynolds.
Mu: Harold Kirby, Jr.
Nu: Edward M. Wyer, Jr.
XI: Edgar C. Tullis.
Omicron: John W. Schauer.

Phi Sigma Members Present at the Convention:

Achsa M. Bean: Delta.
Bert Cunningham: Zeta.
Ira E. Cutler: Epsilon.
Kathleen Dohering: Kappa.
F. W. Fabian: Theta.
Opal N. James: Lambda.
Granville B. Johnson: Epsilon.
Adib Karam: Eta.
Anselm M. Keefe: Zeta.
Harold Kirby, Jr.: Mu
R. W. Leukel: Zeta.
Iva A. Merchant: Delta.
J. M. Murray: Delta.

Lowell E. Noland: Zeta.
C. I. Reed: Alpha.
Catherine A. Reynolds: Lambda.
John W. Schauer: Omicron.
Fanny Fern Smith: Iota.
Vera Smith: Kappa.
Margaret Sumwalt: Iota.
Edgar C. Tullis: XI.
Louis E. Wehmeyer: Beta.
Edward M. Weyer, Jr.: Nu.
Robert H. Wolcott: XI.
Parke T. Woodard: Kappa.
H. Baird Young: Omicron.

Convention Called 9:30 A. M.

The President: One of the first items listed is that of reports from the chapters represented. We will begin with that of Mr. Wehmeyer, of Beta.

Beta: For Beta Chapter, I will say that we have approximately 30 resident members, about 15 of whom are active so far as the paying of dues is concerned. We have about six biological societies represented at Michigan, to one or more of which most of the students in biology belong. As a result, members whose interests are with other groups are often not as active as they might be if the situation were otherwise. We do not keep all of our members of the previous year; they are coming and going constantly. We took in 12 active and 3 Faculty members at the last initiation. Besides our active members, we have around 30 resident faculty members.

Our usual program for the last few years has been two meetings each month. We usually have a faculty speaker at one meeting, and have an active member speak at the other. We follow the speech with refreshments and discussion. This year, we have had but one meeting each month, because it was difficult to get people out more often. We usually hold a second meeting for consideration of business matters.

The President: I would like to ask Mr. Wehmeyer about Michigan.

Mr. Wehmeyer: We have an organization made up entirely of men. So far, nobody has questioned this situation, and we have had

no trouble. There is a place for women in research at Michigan in other societies and that is probably one reason we have not run into difficulties in this respect. Furthermore, Phi Sigma is probably the one Society in which only men are admitted. Most of the others admit women also, and we feel it is good to have one that is purely for men.

Delta: For Delta Chapter, we have 22 active members this year. We have 8 graduate students, 9 seniors, and 5 juniors. That is not counting the Alumni and Faculty members, however.

We have held meetings every two weeks. The first meeting of the month is usually one in which the Alumni members come in, and there are brief talks given. In the second meeting, there is a general discussion and then refreshments. The attendance is very good, and very few delinquents in the financial end. Our members are usually very active, and we are fortunate in being the only biological society there at this time.

Eta: Eta Chapter has 12 active members who meet once a month. Our plan and program is in alternating our monthly meetings; one month we have an outside speaker, a man or woman who is interested in a biological science and is a worker on that subject. Then, in the following meeting, we have our own member responsible. We alternate that way, and get interesting programs.

Iota: Iota Chapter this year has a membership of thirty-two active and fourteen faculty members. Most of the student members are transients, quite a large group joining each fall and relatively few remaining the following year. Three departments of the University are represented in Phi Sigma, the Department of Zoology, the Medical School and the School of Botany, and meetings are held alternately with each of these departments.

Until this year, our programs consisted of reports by active members on their own research. At times under-graduate students are present and give reports on other interesting papers. The Chapter is rather an active group. Our programs are always followed by discussion and light refreshments.

With the exception of those taking biological chemistry, we have not enrolled medical students in the chapter until this year. Now, however, we are accepting straight medical students in bacteriology, but these form a small percentage of the entire membership.

Mu: This is the third year in Mu that we have enjoyed membership in Phi Sigma, and we have profited by membership in the national organization. We have a very large group of biological students in California. We limit our membership to graduate students, only taking in the undergraduates who are especially promising. We have three chief schools there: medicine, agriculture, and the liberal arts, that is, good pure science. We have the strongest membership in the School of Medicine, students who are doing research work in biology, physiology, and chemistry. We have some whose scholarship has promised to be very high, but who have dropped out of Phi Sigma. From the School of Agriculture and the School of Medicine we have some of our best members. In agriculture, the plant pathologists and others are doing real good work.

Our programs have been mainly in business meetings combined with the general program, and we have been quite successful in these. Most of the meetings have been conducted by the graduate students themselves, and sometimes as many as two or three at a time. Other

meetings conducted by outsiders have also been successful. We have had meetings in which as many as 300 outsiders were there. Recently, the policy has been planned of having a talk led by some experienced man on some phase of biological science, and in having the members take part in the discussion.

Our Chapter has 233 members, many of whom are Faculty and Honorary. We have now 36 active members; but the exact number of Faculty I cannot give. The Honorary members perhaps number five.

Nu: Anything other than a short report of the activities of Nu Chapter would be a repetition of what has just been said by other delegates. Our method of carrying on meetings is identical to that of the other chapters. Any way in which our chapter may differ probably arises from the nature of the college in which we are located. Our graduate school is small, and post-graduate work in biology is not extensive. For this reason, our chapter is essentially an undergraduate group.

Nu Chapter has a total membership of about fifty-seven. Nine or ten of these are active members, and three or four are honorary members in the faculty. We have one regular meeting every month; and other special meetings for business and so forth, when necessary. Every new man is required to give a paper within a reasonable time after he has been initiated. Two papers are given at each meeting. We have prospects of bringing several good outside speakers from Pittsburgh and elsewhere, in the near future. The meetings have been quite successful so far this year.

The Secretary. What is the attitude of Dr. Martin toward the organization?

Mr. Weyer. He is heartily in favor of what the organization is doing. He attends the meetings regularly, and would like to be at this one.

The Secretary. What effect did Dr. Greer have on the organization?

Mr. Weyer. Dr. Greer did a very great deal toward making the Biology Department at Washington & Jefferson College what it is today. By improving the equipment and fixing up the building in which the department is now located, he greatly increased the facilities for research in Biology.

The Secretary. Can you give us any information as to why Dr. Greer left there, which might be of concern to us?

Mr. Weyer. No Sir. All that I can say is that, by his departure, Nu Chapter lost a valuable and warm friend.

Epsilon. We think we have quite some chapter, especially since we have two national officers in it. We conduct our meetings very similar to those that have already been reported. Our plan is to have outside speakers come in and give us material. We have had such men as the ranking medical officer of the Philippine Islands, the

State pathologists, and men of like calibre. We have very excellent undergraduate members, pre-medical men, and those who have decided to make the various phases of biology their life work. These students present papers, and upon entering the organization, present a paper on their favorite topic; they choose what they wish to discuss.

To stimulate research, Phi Sigma has designed a gold medal to be given once a year to the student who has the highest scholastic record along the lines of research. He must be an undergraduate student.

The Secretary: Is anyone eligible?

Mr. Johnson: Yes, and for that reason, Phi Sigma is known as an organization which fosters research work from the scientific standpoint. There are students in nearly every department striving for that medal. This medal is well worth any effort expended to acquire it.

The Secretary: What is the attitude of the chapter toward women members?

Mr. Johnson: "God bless the women." Our chapter appreciates this truth, but at the same time, we want this to be a stag organization. The actives, honorary, and faculty members, voted on that, and for once they were unanimous, and so we are trying to keep it a stag organization.

The President: We have approached the group of women in the Department who are assistants, etc., and we discovered that they themselves would "a little rather be separate." That is the corollary.

The Secretary: I think we had better give the detailed history. In the fall, I received a letter from a lady in the University of Denver who asked if it would be possible to have the group of women there organized and admitted as a sister chapter of Phi Sigma. I referred the matter to the rest of the National Officers, and so far that has been the end of it. But they distinctly asked for a separate chapter.

Now, two chapters in the same institution has been out of the question so far. The question of coeducational membership in Phi Sigma has been purely a local issue and left to the individual chapters. I was in hopes, however, since they were very much in earnest, that the chapter would see fit to open its doors to others who are coming into science in every direction. Every chapter which has admitted women has benefitted thereby. We have three chapters where they are not admitted to Phi Sigma.

The President: In reference to this situation, I made it a point to talk to some of the leading members of the Society, and I found that as a matter of fact, the women would really prefer to be separate. They did not give any particular reasons why, but they did want a chapter of Phi Sigma. But it doesn't seem right to have two chapters in the same institution.

Now, we have thought of this: They might be taken in and have two meetings a month as now, one meeting headed by some professor who gives some topic, and then have a general meeting. We thought that possibly we might have the women in connection with that for one meeting, and the men for the other.

XI Chapter: In XI, we follow the usual custom of having meeting every two weeks and having papers by the active members, and

sometimes by the Faculty. Once each semester, we have a meeting with the reading of papers, and then entertainment afterward. We invite people whom we think would make good members, and look them over at that time.

The Chapter has 24 active members 3 of whom are graduates. Most of the members are Seniors, and we have no Freshmen or Sophomores. Then, we have approximately 10 who are alumni, I have not the exact figures. You asked me about the number of faculty members who are fellows in the A.A.A.S.: we have two.

Theta Chapter: The chapter has a total membership of seventy-two of which eighteen are active and twenty-one associate members. Our policy is to take in new members every semester and during this semester we have added ten new names to our roll, all of our members being graduate students in the biological sciences.

At our meetings, held monthly, the subjects discussed have consisted chiefly of the work being done by the graduate students at the college, particularly their research problems. About once a semester we have a talk by some outside speaker, on a biological subject of general interest, and on this evening a banquet and some other form of entertainment are given.

Zeta Chapter: I bring the Convention greetings from Zeta Chapter. We have, as I suppose every chapter has, a combination of honorary, alumni and active members. Our honorary list names five men of high standing in the University and we feel that we have achieved something this year when we added to their number the President of the University, Dr. Edward A. Birge, widely known for his biological research. Then we have a total of 17 alumni members, all on the University Staff, resident in Madison. Among the active members there are 34 from last year, (here is something of which I shall say more later) and just before school closed for the holidays we initiated 20 new members whom we think will give every service possible to the organization.

We have come to the crossing of the roads where Phi Sigma has not only to give honor to those who have labored in the interest of science but also to those who will bring something to Phi Sigma as well. I think that with such an idea in mind we ought to get a great deal more out of our future activities than in the past. I do not know how the rest of the Chapters feel about it but I think that an honorary organization like this should show its appreciation of the work likely to be done by active members. It seems to me that if Phi Sigma is going to get anywhere they should be chosen because they are a little more active than members of most honorary organizations. I said that Zeta Chapter has 34 active members listed—but some of these are dead-heads. Some of them have been on the books since before I entered the organization yet they do not come to meetings. I do not know whether that is the situation with the rest of your Chapters very generally, but that is our situation. These men are listed as members but that is as far as it goes. It seems to me we should take some action on the problem.

Zeta Chapter has several open meetings every year. This year we intend to invite a lecturer of more or less national prominence from some other University. Such a lecture will probably be given as one of the University Convocations and will be an active step toward bringing our Chapter before the University at large.

Kappa Chapter: We began the year with twenty active members and twenty-three faculty and honorary members in the active chapter, the rest being alumni. In making up a list of members very few alumni could be located; they must be somewhere else.

Beginning in October, meetings have been held twice a month. Last year meetings were held during the noon hour but it was found that this did not give sufficient time and this year the hour of 5:20 p. m. was adopted. Owing to the extreme efficiency of our entertainment committee, luncheons have been served at thirty cents each. The talk usually lasts thirty to forty minutes, followed by a half hour's discussion and business matters. This has proved to be a very satisfactory plan, practically all active members having been present at each meeting, and the faculty members having attended with surprising regularity.

A general review of the fields of science that Phi Sigma represents, comprised in a report about a half hour in length by the head of each department, was requested. From all reports of the meetings this has been extremely satisfactory. There is, of course, discussion after the talk. Practically all of these reports have been heard and it is now our intention to have more specific discussions. One of the best things that Phi Sigma is trying to do is to reach the undergraduate who is interested in research, but does not know very much about the field of science. By presenting the active work being done in the various fields, we seem best able to serve him.

In selecting new members the question of qualifications arose and it seemed safest to recommend only those students who were doing some type of research work, most of them graduate students but not necessarily all. These recommendations, signed by the heads of departments, were presented to the organization and a meeting held in which difficulties were cleared up. As a result a very creditable group of initiates were secured, fourteen in number. These were initiated at the close of school before the holidays and will be reported later.

Of course the same financial difficulties have been encountered as in the rest of the chapters but our financial condition is more satisfactory than at least one organization you spoke of. There was some dissension over the \$3 assessment but it was finally paid by almost all the active members as well as the other regular assessment. In addition to the dues we laid on a dollar blanket tax for our own expenses. Our financial obligations have been met.

One disappointment was our inability to locate absent members for furnishing a list to the National Council. There was no record of the positions held by these members. In the short time available as complete a list as possible was made up but it was far from complete. To prevent future trouble a card index has been started, containing as much information as possible about the members, and an effort will be made to keep this up to date.

Omicron: We have in Omicron chapter 15 active undergraduate members which does not include several others who are graduates. Our graduates are student assistants in the University and they support and help us consistently. We have prospects of four seniors in the future, and at least six are men.

Our meetings are held bimonthly, at one the members report their research work in progress while at another biological problems are discussed and talked of with the members of the teaching staff.

who present the subject. Our meetings are open to the entire school and some times well attended by the students on the campus. With the meeting we have a little luncheon.

At present we have but little money in the treasury, having had two banquets, one in early October, and then an informal one more recently.

As for membership we have provisions that every student must have three years, and then we require that the year following graduation they do research toward a master's degree. Our members are largely recruited from the Arts college.

A very fine spirit of cooperation exists between the departments of physiology, biology and botany.

Lambda: Our chapter enrolls at least 15 new members a year. We hold our meetings at least once in three weeks, and we have different professors in the colleges give lectures, and then a social session follows. The meetings are well attended and there is interest among the students in everything we do.

The President: On the whole, these reports have been very satisfactory.

Reports of National Officers

The President: The next on the list is in the reports of the National Officers. In this connection, of course, the President's Report will have to be more of a forecast than a review of anything he has done, because as you say, "I am a new horse in the harness." In this connection, therefore, I thought that I would read a portion of something I prepared for *The Biologist* that was not printed. That would give you the idea I have in connection with the work; so it is with a forward glance that I take this up. (Reads)

A FORWARD GLANCE

It is with the sincerest regret that we lose the leadership of Professor William Albert Setchell, whose arduous duties compel him to relinquish the National Presidency of the Phi Sigma. We feel that his wisdom and guidance would have carried us forward in a most glorious manner.

As the newly elected President of the Phi Sigma, the things that I crave most and without which I shall utterly fail, strive as I may, are constructive criticism, frankness of expression, willingness to do whatever seems to the majority best, and to our cause a loyalty that will not waver or fall in times of stress. Let us all keep in mind and use as our motto, "The greatest good to the largest possible number".

Surprises come to all of us, but there is a supreme moment when one is elected to a high office among his fellow men, and especially in this true when chosen by his co-workers. I feel that perhaps another might forward the interests of our beloved Phi Sigma to a greater extent; but rest assured that since I have been elected, and knowing something of the responsibilities and duties which devolve upon one in such a position, I shall do all in my power to serve efficiently.

I hope sometime to greet all of you personally, but for the present, this must suffice as a hearty handclasp and hope expressed that our beloved Fraternity will ever be true to all the high principles and ideals that have been maintained by our predecessors.

No organization should be countenanced by the public if it does not in some way seek to advance civilization. There are enough retrogressive tendencies in nature—and these apply to Man—to keep any group alert to discover means and methods of combatting them. Advancement is possible only as these drawbacks and hindrances are reduced, laid aside, removed, or put down forever. Every member of the Phi Sigma should have in mind some high ideal, some goal which in his own consciousness he feels will contribute something to the common good of mankind.

Phi Sigma is looking, not only for men of wonderful mental capacity, but as well for those who, along with their deep thinking and painstaking accuracy in everything, can look out upon the world with a heart full of love for their fellow men and determine in some way to raise the general status of the world at large.

It may be that some member may open up something in the biological realm that will set the world ago, as has the Death Ray in another field. Shall it be some new discovery in Bacteriology, Embryology, Chemical Biology or Genetics? Will it be found hiding in the chromosomes, genes or some other part of the living protoplasmic entity; somewhere, it is waiting for the genius to discover and startle the world. If our nation is always to continue on an upward way to higher levels of thought and action, never to fall as have other nations in the past, it will be because she shall have observed all the Biological laws formulated in the beginning. We feel that not only every member of the Phi Sigma, but every thinking human being should know, understand, and abide by these laws. If this is true, our Nation is safe.

Phi Sigma, look to your laurels. Let it not be possible for any man to say that a single member has fallen short of his greatest duty to his fellow man and to his Creator.

(Applause)

The President: We will now hear from Mr. Noland, our Vice-President.

Mr. Noland: The office of Vice-President is not very exacting in its duties. It is to supplement the work of the President when he is over-busy, or when by some misfortune, the office becomes vacant. I have taken part in the advisory functions of the Central Governing Body, and have tried to do what I could to advance the interests of the Society. I would like to emphasize that at the present time, we should try to get a little more unified idea as to the purpose of the organization, and some idea also as to how we can better achieve that purpose in the different schools. I am sure that the different chapters will help each other, and if we can talk these things over among ourselves here, we can go back to our chapters with a new enthusiasm and a new efficiency for the local chapters and their work. (Applause).

The President: We will now have the report of the Treasurer.

The Secretary: (Reads) To the convention of Phi Sigma, Greeting:

I deeply regret my inability to be present with you at this the first convention of Phi Sigma, but circumstances will not permit it.

I am certain that the scholastic and scientific affairs of the Society can be safely intrusted to the other officers; hence I will not take up your time on those subjects, but confine my remarks to the administrative affairs of the organization as they have come more closely under my observation and as I have been in the harness longer than any of the national officers I will ask you to pardon me if I seem to touch on points that do not pertain strictly to the treasurer's office.

I would not advise any radical change in the constitution other than to provide for convention government as well as the present form. Do not discard the present form entirely, but leave it as an alternative, as we may find that conventions are too costly to be indulged in frequently. The constitution as it is, is workable, although it needs some modifications in places, but do not try to do it all at one jump.

I should like to see a budget established as soon as possible, but at present it is not possible to do that.

I would like to see all the alumni members subscribe to the Biologist. If 50% of them would give \$1.00 a year to it, it would relieve the active chapters of the expense of printing it and an annual assessment of about \$4.00 on the active membership would, I believe, meet all our expenses and allow us to have a convention every other year. This brings me to the point of expansion. Every new chapter is a financial asset to us after the cost of installation is paid, for we can carry 50 chapters with very little more overhead expense than we can carry 25 on. So if we will bend our efforts towards a little more expansion it will greatly assist in solving our financial problems.

You have all seen the report in the last Biologist. It shows that we have been living within our income for the last year or so, whereas before some of us have had to pay organization bills out of our own pockets. I had hoped to get out four issues of the Biologist this year, but I fear that the convention expense is going to consume the money that was being saved up for that purpose. At this date I cannot make up an accurate financial statement, as I have not yet settled for the expenses of the meeting, but I will get word to Reed by wire while in Washington as to how things stand in general; but it is reasonable to assume that the treasury will be empty and there may be a hole in the bottom of it when the convention closes, and unless the convention takes some action to relieve the situation there will not be funds for another Biologist this year nor for carrying on the expenses of the National Secretary for the rest of the year.

In selecting a new Secretary, as Dr. Reed has asked to be relieved, make certain of getting someone who will attend to the duties of the office, but, as Reed has said, it has come to the point where it is very improbable that we can get anyone to do it for the pure love of the work. I find that I am obliged to give the Society work several hours a week and at times I am slow in getting around to it. It is immaterial to me as to whether or not I am returned to office, but if the Society is willing to put up with such service as I am able to give, I am willing to continue for a time yet and serve as best I can.

Faternally yours,

ERWINE HALL STEWART.

To supplement that report, I would like to say that Stewart deserves the hearty cooperation of everybody. I admire him very much.

So far as his business is concerned, he is interested, but he is a naturalist. He lives forty miles from the railroad, and in spite of the isolation, he is a busy man; he writes a great deal, and has to write letters for many of his neighbors. He has kept up his own interest in everything concerning Nature. He is a biologist, botanist, and geologist, a general naturalist. He has kept up his scientific interests, and after a hard day's work, he gives his time and energy to work of Phi Sigma. He is doing this purely for the love of the work. This gives him a touch with the scientific world that he loves, and wants to be associated with.

I have two communications from past Presidents:

THE TULANE UNIVERSITY OF LOUISIANA
COLLEGE OF MEDICINE
NEW ORLEANS .

Department of Anatomy

December 23, 1924.

Mr. C. I. Reed,
National Secretary, Phi Sigma
New Ebbitt Hotel
Washington, D. C.

Dear Reed:

News of the Phi Sigma national convention, in your letter of December 17, is most gratifying. I regret that it is impossible for me to attend.

It is good to see Phi Sigma thriving, with growth and increasing activities as a national body and with spirited interest in the separate chapters. Each member may well now congratulate himself upon being identified with Phi Sigma, for the increased benefits which he may receive and extend through the concerted efforts of his Society.

With best wishes, I remain

Yours very sincerely,

HAROLD CUMMINS.
3rd National President.

EMORY WALTER SINK, M. D.
721 N. UNIVERSITY AVE.

Ann Arbor, Mich., Dec. 26th, 1924.

Prof. C. I. Reed,
New Ebbitt Hotel,
Washington, D. C.

Dear Prof. Reed:

Your letter at hand. I am sorry that I did not learn of the Convention at an earlier date, for it might have been possible to arrange so that I could have attended. Allow me to congratulate you personally for finally having the convention. You know we always wanted one but felt some hesitation in putting it over. With the best season's greeting and best wishes for the new year.

Very sincerely yours,

E. W. SINK.

To the Officers and Members of Phi Sigma:

It is with deep regret that I am unable to attend the convention and extend a few remarks to you in person. However, I cannot let the occasion pass without sending you a few words. First of all, I extend the season's greeting and best wishes for the New Year. Secondly, I want to congratulate the Society for having a corps of National Officers who have really "put the convention over". The holding of a national convention was always in mind, but each year, it seemed that there was not enough pep and push to warrant the undertaking. Our Society now is large. Its aims are broad. Its chapters are far-reaching. It is therefore time and occasion for co-ordinating these aims and ideals. The chapters must show unity and cooperation toward the Central Governing Body. Although the chapters may differ on matters locally, they must have one spirit for the society as a whole.

I do not wish to take your valuable time in suggesting new procedures, nor in giving criticisms for the past. I know Prof. Reed and Mr. Stewart will be instrumental in giving you the best there is for creating and maintaining the ideals of the Society.

With this short word of greeting and good wishes, I hope you will have a worthy convention and that this occasion will make it possible for a more unified spirit and cooperation among the several chapters.

With best wishes and deep sincerity.

EMORY W. SINK,

Fourth Past National President.

For immediate consideration from the Secretary, we have a petition from the Biology Club of the University of Illinois:

**UNIVERSITY OF ILLINOIS
DEPARTMENT OF BACTERIOLOGY
URBANA, ILLINOIS**

12-16-24

**Mr. C. I. Reed, Nat'l Sec. Phi Sigma
Dept. of Physiology
University of Chicago
Chicago, Ill.**

Dear Sir:

Enclosed find petition for Phi Sigma Honorary Biological Society furnished me by Mr. C. E. Moore with whom you have corresponded regarding this matter. Thanking you for the interest already shown, I remain

Very truly yours,

EDW. DEVEREUX.

1. Name of petitioning body: The Biology Club.
2. Name of University or College: University of Illinois. Located at: Urbana, Illinois.
3. Total student enrollment for current year: 9000.
4. Number of students in biology for current year: 1,500.
5. Number of teachers on staff in biology: 22; assistants, 30.

6. Length of time local society has existed: One year and one half.

7. Total membership in society: 40.

8. Number of members leaving at end of current year: Not over 5.

9. Number of members returning, for following fall term: 35.

10. Names of Members	Age	Degrees	Specialization
1. Moore, C. E.	38	B.A.	Plant Breeding
2. De Coursey, R. M.	24	B.A.	Plant Pathology
3. Welch, Hazel W.	28	B.A.	Botany
4. Devereux, E. D.	23	B.S.	Bacteriology
5. Wallace, G. I.	23	B.S.M.S.	Bacteriology
6. Johnson, M. S.	24	B.S.M.S.	Zoology
7. Bailey, Clara M.	24	B.A.	Botany
8. Milligan, Mary V.	25	Ph. B.	Botany
9. Young, P. A.	26	B.A.M.A.	Plant Pathology
10. Williams, Emily	30	B.S.	Physiology
11. Schroeder, Laura J.	27	B.S.	Botany
12. Hayes, W. P.	37	B.S.M.S.Ph.D.	Entomology
13. Henry, Bessie L.	25	B.A.	Botany
14. Ossewaarde, Cornelia T.	21	B.A.	Botany
15. Abbott, H. C.	29	B.S.M.S.	Plant Pathology
16. Strandkov, H. H.	26	B.A.	Plant Physiology
17. Reid, P. E.	27	B.S.	Botany
18. Turner, L. M.	26	B.S.	Botany
19. King, G. E.	33	B.S.	Entomology
20. Windsor, Margaret	20	B.A.	Entomology
21. Pettinger, N. A.	22	B.S.M.S.	Plant Breeding
22. Nelson, F. C.	24	B.S.	Entomology
23. Blevins, Lusettie	38	B.A.	Entomology
24. Steggerda, M.	24	B.A.M.A.	Zoology
25. Stark, O.	26	B.A.	Botany

In behalf of the above named members, I hereby petition the Central Governing Body and the several chapters of Phi Sigma for a charter for the above named society. If granted, the above named society hereby agrees to abide by the established constitution and by-laws of the Phi Sigma Society.

Signed by EDW. DEVEREUX acting as Secretary of the above named society, on the 16th day of December, 1924.

I will state that the Professor of Biology of Trinity College is here, and expects to present a petition during the day.

Mr. Stewart also sends the following information as a report on actives:

	Feb. 10th, 1923—last paid.	
Alpha		
Beta	Pd. Dec. 15th	\$15.
Delta	12	17
Epsilon	12	1
Zeta	15	28
Eta	12	12
Theta	10	13
Iota		31
Kappa	20	24

Lambda	15	—
Mu	10	—
Nu	8	8
Omicron	8	11
XI	18	—
Dec. 13th Received on assessment		\$194.
Pd. out on fares		\$579.55
In treasury		300.00
Still due to be paid		430.00

Omicron has paid on the initiation \$3 on every active member at the time of convention, and the chapters voted on that, so that the assessment should have been on every initiate as well as old members. Every recent initiate still owes that assessment of \$3.

We have about \$100 in the treasury, and with the secretary's office expenses paid, up to within about \$20. The last stenographer's bill for the month of December has not yet been paid.

The last issue of the Biologist cost about \$80. Stewart is not able to give a definite report, but that gives an idea of how things stand.

Those of you who were chapter secretaries remember that when I first reported to you, we had hoped to get by with \$2.50. I think we were misled. A year ago, we had up the question of the convention at Cincinnati. That would have cost about \$800. In order to get definite figures, I sent out a questionnaire to every chapter as to how many active members there were. 290 members were reported. On that basis, since there have been two new chapters added, we should have had 300 members active at the present time. \$3.00 assessment would bring \$900. With what was already in the Treasury, we should have had no trouble in meeting all expenses on an assessment of \$2.50. But as a matter of fact only 165 members paid national dues last year. Who held out? Presumably a few in every chapter. Is that fair? To allow members on your list who do not pay up and from whom we will not collect dues or assessment?

Wehmeyer: We are supposed to turn in reports about the middle of November. We compile the resident active members, and do not hold the meeting until the latter part of October. As a result, we do not know who will pay dues and about half do not come across. I think that explains part of the discrepancy.

The Secretary: But the other group, later in the year—they did not come in on that. Your chapter happens to be clear at this time.

Mr. Wehmeyer: We have to report who we expect, and very often we do not get what we expect.

The Secretary: Dr. Noland explained why we misjudge the chapters on that basis; but I think we ought to have more than 300 members this year. We certainly cannot get by with \$2.50. As it is, we will just get by with \$3.00. That is the situation now.

Mr. Keefe: Did you get the report of 24 active members in Zeta? That was on the basis of the year before.

The Secretary: We want the number at the present time.

Mr. Keefe: I gave the list as of June 4.

The Secretary: Everything this fall has been in a rush. So do not take my criticism too seriously. We are asking you to turn in a complete list of the members, and whether they were members of

the Association for the Advancement of Science, and whether they were Fellows of the Association. The Association solicited our co-operation in this. Early in the fall, I tried to get arrangements for this convention, and the Secretary asked that we affiliate. We would have two representatives on the Association Council, but they must be men who are Fellows in the Association. We must have two good Fellows in the American Association. We have to present to them a complete list, and also give them more detail about the organization and its purposes. We have to turn that in with the application for affiliation. Sigma Xi and others are represented and have at least one or possibly two members. Please turn that list in to me before you leave the city.

REPORT OF SECRETARY

In making this report, your secretary is obliged to include to a large extent the activities of the entire Central Governing Body for some years past, inasmuch as the activities of the secretary's office are not easily separable from those of the other offices. The first radical change made in administrative procedure after assuming office nearly four years ago was in the matter of national dues. This amendment originated in the secretary's office, was passed upon by the Central Governing Body, and later accepted by the chapters. The reasons for its formulation are as follows: During the earlier years of the existence of Phi Sigma, the national officers paid the expenses of their individual offices out of their own pockets. While the society was still small and not engaging in any direct effort at national solidarity, this was not a heavy burden. With the growth of the organization, however, it became absolutely necessary for the national officers to have some source of revenue other than charter fees in order to function at all. As finally framed, however, the constitutional provision is susceptible of ambiguous interpretation. It seems advisable that the convention correct this.

Chapter Roll—Petitioning Groups

Since the time when this provision was resorted to, a number of new chapters have been added, two of which the secretary had the honor to install—Kappa Chapter at the University of Kansas, and Xi Chapter at the University of Nebraska. Lambda, Mu, Nu, and Omicron Chapters are the others included, the last having been installed by the Vice-President. The petition from Emory University has been granted and the chapter will soon be installed as Pi Chapter by the present National President, Dr. Cutler. Information has been received that a petition is being prepared at Trinity College, at Durham, No. Carolina. Other institutions have from time to time expressed interest but so far as the secretary knows, there are no immediate prospects of any other petitions. If every member of Phi Sigma now working in an institution where there is no chapter were to make a definite effort to organize a new chapter, we might in the next two years double our chapter membership. Unfortunately, most of our alumni in other institutions have taken very little interest in this line of activity. Three chapters have been organized by mem-

bers of Lambda Chapter who have gone to other institutions. If every chapter could put that sort of interest into its members, we would have little concern about the future. The total membership of the various chapters now recorded in the secretary's office is as follows:

Alpha	95	Theta	73	XI	41
Beta	241	Iota	87	Omicron	23
Delta	74	Kappa	124	Total,	1293
Epsilon	53	Lambda	69		
Zeta	131	Mu	179		
Eta	48	Nu	56-55		

This gives a total of 1293 members. At the present time, December 26th, not all of the chapters have filed all membership records. There will perhaps be thirty or forty more to add to this total.

Chapter Delinquency

This brings me to the question of delinquency of the chapters in this respect. The national organization has provided that the secretary shall keep on file a complete list of members with the qualifications of each at the time of initiation. In spite of specific instructions printed on the blanks, it has been necessary to call to account nearly every chapter secretary with whom I have dealt. This information is required, for a specific purpose, and the chapter secretaries should be willing to cooperate in securing it, and the newly initiated members should be willing to supply it. It has been contemplated for some time that the secretary should also provide a rotating directory of all members which might be kept revised up-to-date and printed frequently. Because of failure of the chapters to keep the secretary informed of changes of address, it has been impossible to carry this directory along. Both of these points should receive consideration from the convention.

Employment Bureau Proposed

Another activity of the secretary's office which might well be taken into consideration is that of an employment bureau. It has been possible in a number of cases to assist people in securing positions in other schools. The activity in that direction, while not extensive, has indicated that this might well become a definite function of the organization, provided the chapters will all give their cooperation. Without this, little can be done.

The Biologist

Because of the extent of the organization and the long interval between meetings, it has been felt that we should have some means of bringing before the general membership some source of information concerning the other chapters and the society at large. For this reason, the publication of The Biologist was undertaken. This organ

has been criticized many times from many angles. Many of the criticisms are entirely just. We have no sources of material except that provided by the chapters themselves. If the chapters do not provide material, the volume of *The Biologist* decreases proportionately. It is, however, necessary to have some sort of official means of communication with the membership directly other than by communications to the chapter secretary. These are read in meetings which are necessarily crowded with other things. Many members will not have a chance to hear them at all. Therefore, the consciousness of each member of the national society will be very small. If Phi Sigma is to continue as a national society, that situation must not be allowed to develop. The future policy, means of support, and content of the official publication, then, should receive careful consideration.

Strong Centralized Government Necessary

It is practically impossible in the present day for any organization of college students to attain to any high degree of development or coherency of action without a strongly centralized national government. Now I am aware that many chapters will feel that the individual chapters should have more right of self-determination. That is all right for a local organization. In that case, then, the national organization might disband entirely, but if we are to have a national organization at all, it should be developed with the strongest kind of policy.

Potential Influence to Science

It has been a constant source of surprise to me to note the tendency towards a static condition in our organization. While I do not deny that most of the activities of Phi Sigma have been for the betterment of all concerned, I do not believe the beneficial results have attained anything like the magnitude that is possible with the means available. With a society such as this, in the institutions where it exists, and with its extent of membership, we should be able to attain to a degree of importance in the scientific world such as is not enjoyed by any organization open to student membership.

National Research Endowment

Four years ago, on becoming secretary, I took up with the National Research Council the question of receiving aid from that body in establishing endowments under the auspices of Phi Sigma for the specific purpose of aiding students in scientific work, making grants for support of research, giving publicity and encouragement to those beginners in scientific careers who had not yet attained to a position of prominence that would gain for them the prestige necessary to accomplish such results of themselves. I was told that the only

thing in the way was the lack of a strongly centralized national policy. Whether this opportunity will ever come again I do not know, but certainly this organization should take steps now in the direction of preparedness for assuming such a responsibility, should it ever again be possible.

"Boosters" vs. "Knockers"

Phi Sigma today has departed a long way from the original intent and the policies founded thereon as developed by the founders. There is an increasing tendency to say, upon becoming members of Phi Sigma, "I don't like this or that. Let us change it." To such individuals I would say, "You have a chance to know what Phi Sigma is before you become a member. If you are not satisfied, don't accept membership. Or if, on better acquaintance as a member, if you do not find things as anticipated, withdraw at once." Phi Sigma does not want members who are not willing to work and boost. At the present time, we are loaded with dead timber.

Then There are Assessments

A chapter secretary recently said by way of explanation of the fact that not all active members had paid the assessment, that there was no way of making members pay and that the chapter should not be penalized and deprived of right of representation because of the action of a few members. Perhaps not, but in that case the Central Governing Body has a right to demand that all such members be eliminated from such chapters, or else the Central Governing Body should have the right to expel them.

Attention!

From my experience as secretary, I am going to mention briefly a number of things that demand attention:

1. Necessity of more careful selection of members by the chapters. It is not necessary that all students be included who might be technically eligible. But certainly all such persons should be considered. All new members should be put through a course of preparation or instruction that would impress them with the importance of serious attention to their individual obligations as members.
2. The constitution should state more clearly the aims, objects, and purpose, also qualifications for membership.
3. Provision for conventions every year until the society is better established in the scientific world.

7

The President: Any questions?

Mr. Johnson: I would like to make a motion for a vote of thanks to both Mr. Reed and Mr. Stewart for the excellent work they have done. This is Mr. Reed's fourth year in this work, and I think we should go down on record as thanking both of these men for the work they have done. Had it not been for them, we would not have had this convention at this time.

(Motion seconded).

Dr. Cutler: The motion has been seconded. Are there any remarks? Mr. Stewart is a very conscientious man in all of his work. He has had this work on his hands for eight or nine years.

The Secretary: He has been an active officer since the first chapter was founded.

(Motion carried).

The President: Regarding the matter of affiliation, I think we ought to do this if we possibly can.

Mr. Johnson: In this regard, I will say that our members are young folks, and if we affiliate with the A.A.A.S. we can arrange for a session here at which these members who cannot come, can present their research papers. And there is a possibility of putting in a little abstract in our Biologist, and I think that would be a stimulus to our members. If it is in printed form, they have a feeling of accomplishment.

The President: That is a very good idea indeed. Would the request for affiliation have to go over to the last of the year?

The Secretary: Yes, because we cannot get anything by having it presented now. We can do that better a little later by correspondence. I told the secretaries to make out these lists and send them in. They must be in form so that I can make something definite of them.

The President: This list includes not only the actives, but all the members.

Mr. Keefe: How can we find out which members are Fellows?

The Secretary: At Association headquarters. If they are members of the Phi Sigma, we have a perfect right to present them as members. You might find out at Association headquarters, or perhaps you should write to the people themselves. The paper will not be published until long after this meeting.

The President: If there is nothing else, we might as well have the report now from the Secretary on Alpha Chapter.

The Secretary: The situation with Alpha Chapter is as follows: Like all the other chapters, this chapter practically discontinued activity during the War. After the War, a few members were elected, meetings were held irregularly, and in general the chapter was in a very lethargic state. The National officers tried to encourage them and to help them as much as possible and repeatedly solicited opportunities to have one of the officers go there and meet with them. These offers were always met with evasion and negligence. P. B. Wiltberger, one of the charter members of Alpha Chapter, a man who was formerly very active and instrumental in getting the original chapter established, and who had returned to school in 1920 to study medicine, was secretary for a time, and it was during his term that the difficulty really started. He kept writing glowing letters about what was "going to be done." The chapter was "going to be revived

very soon." However, his information was always of a very general nature, and finally he was told to either give us the desired information as to the actual status of the chapter, or, if he could not do so, to resign and let someone else be the secretary. He did so, and a new secretary was elected, who served during the school year of 1922-1923. On February 10, 1923, the chapter paid national dues on all members active at that time. Last year, Wiltberger was elected President. John W. Larcombe was secretary. Both these men, as well as most of the active members, were medical students, and since the Medical School was at that time located at some distance from the University campus, the center of activities of Phi Sigma was necessarily removed from contact with the fundamental biological departments. This of itself would have been unimportant had they made an effort to include in the membership the available material in the departments of botany and zoology particularly, and related departments on the campus. In fact, some faculty members have charged that the group was making a definite effort to confine Phi Sigma membership to the Medical School. Periodically, a good deal of activity was engaged in at times, and had a consistent program been worked out, I think there would have been no difficulty. At one time, they collected money and got a prominent speaker from Chicago to come in and address an open meeting. This was a good thing, but they did not protect Phi Sigma and did not establish a definite responsibility on the part of the active members. Since the above date, no national dues have been paid, no reports of activities filed, and no membership records. They have practically refused to carry on programs of a nature that we feel to be necessary to continued success. At the opening of school last fall, we failed to get any reply from anyone regarding the prospects of activity this year. Finally I wrote to Professor W. M. Barrows, one of our members on the faculty of the department of Zoology, and asked his assistance. He solicited information from Larcombe, but reported that he failed to get anything accomplished. They did not elect a president this year, and the vice-president is in a sanatorium. Thus the secretary has all the information and we cannot get anything out of him. Acting on that, the Central Governing Body, under date of December 8, 1924, preferred charges of suspension against Alpha Chapter as a whole, which would allow them two months to do something, and at the same time charges for expulsion against both Wiltberger and Larcombe. We have heard nothing further from them. The Medical School has been moved on to the campus, and in the future there might be some chance of doing something toward reorganization. Last night, I ran across A. E. Waller, of the botany department, who said that he did not believe there was any chance of doing anything further because the scientific departments are over-organized. Knowing him from the past, I believe his report is correct so far as anyone could give it. From this it appears to me that Phi Sigma in Ohio State University must discontinue activity for the present and possibly never be revived. I have always insisted that when any organization or institution outgrew its usefulness, it should voluntarily discontinue activities. This seems to be the case with regard to Alpha Chapter in Ohio State. However, the convention should authorize the officers to take steps to compel Larcombe to give up the charter and all property in his possession, and, if necessary, to take legal steps to secure them.

Mr. Wehmeyer: What is the attitude of the biological faculty and others of the institution who might be interested?

7

The Secretary: None of them know very much about Phi Sigma because it has not functioned since before the war. There has been no definite opposition at all.

The President: You have heard the secretary's report on Alpha. What shall be done?

Mr. Keefe: I make a motion that we adopt his report, and also that we empower an attorney to get the legal documents.

The President: Motion is made and seconded, and now open for discussion. Are there any remarks?

Mr. _____: Mr. Reed knows more about the situation than anyone else. We should give him full power.

Mr. Johnson: The motion as stated gives the Central Governing Body that power, and that can be left to the Central Governing Body.

Question: How about financial proceedings? Is there any irregularity on the part of the officers?

The Secretary: There has been no charge of anything of that sort and no reason to suspect anyone. As the matter stands now, they have a period of two months in which to reorganize if they wish. Later, if any conscientious members wish to rejuvenate the chapter, that also can be done.

Mr. Fabian: I think I know Mr. Wiltberger. He was an instructor in entomology in our school. I wonder if this is the best procedure to take and if it will not make enmity in the rest of the school.

The Secretary: I think we have done everything that we could. I think we are entirely justified in forcing Larcombe to give up all official documents in his possession. We might have an attorney interview him and tell him he will be arrested if he does not comply with our request.

The President: If he were told about this action, he might come through anyway, without our having to go through with that.

The Secretary: I am willing for that, if it will be effective.

Mr. Keefe: Would that be necessary with the Executive Council's declaring the chapter permanently suspended? If some one wanted to revive the chapter, the charter could be returned to them could it not?

Secretary: Yes.
(Motion carried.)

The President: If there is nothing else at this time, the election of officers will follow. Nominations are in order for President, Vice-President, Secretary, and Treasurer. The officers are to take office in June.

The Secretary: May I suggest that we go ahead with the election of officers with the idea that they will be agreeable to any changes to be made in the constitution?

Dr. Cutler having been nominated for President, Dr. Noland as Vice-President took the chair and received a motion that nominations be closed and the secretary be instructed to cast a unanimous ballot for Dr. Cutler as President.

Dr. Cutler: I thank you for the honor. The next officer is Vice-President.

Dr. Noland was nominated and unanimously elected.

The President: The next is Secretary. I for one very much desire Mr. Reed retained, but he practically turns it down.

Mr. Fabian: Before we make any nominations for Secretary, I know something about the job, and I think it is one of the most important offices. Mr. Reed has done a whole lot for us. He may have some good man in mind. I would like Mr. Reed to suggest the names of some men, because the future of the Society, with all due respect to the President and Vice-President, will depend on the Secretary. So I make the suggestion to have Mr. Reed tell us about the qualifications of a Secretary.

The Secretary: In the first place, I may say that I have grown up with the organization, so to speak. I served as second National President, and when Mr. Stewart was called into military service, I served as Secretary, and have been Secretary for four years now. I worked almost continuously with the officers during the interval. It has come to the place now when the duties of the Secretary are pretty heavy, and anyone taking the office must recognize that. About an hour and a half a day ever since school started. I am not situated this year to handle that very well. The only time I have is to have a stenographer for seventy cents an hour come in of evenings and take dictation and bring the material back to me at school the next day. If it was not all done, it must wait until the next day. Whoever takes the job must recognize that is the situation, unless you could put enough pep into your chapter secretary to relieve the Secretary of about half that work. If the chapter secretaries would cooperate, they could cut out a very large part of the expense of the Secretary's office. That is what your responsibility will be. I have no suggestions to offer Mr. Fabian. I have one man in mind who, if he would be willing to take it, would be an excellent man—Mr. Kirby. I suggested in the Biologist that the Secretary ought to have compensation pretty soon. I do not see how you can provide compensation now, but every man must cooperate with the Secretary, or else compensate him. Mr. Kirby has been an active man, and he is far off out on the Coast. I do not know, however, if he is willing to take it.

Mr. Wehmeyer: Is there any possibility of splitting this work?

The Secretary: Mr. Stewart has taken a lot of the work from my hands.

Mr. Wehmeyer: If we could get the cooperation of the chapter secretaries and get you to retain the Secretaryship. There will be a crisis if we have to pick up someone who knows nothing about the position.

The Secretary: One other man serving as a chapter officer might give that up and take the secretaryship. That is Mr. Woodward.

Mr. Wehmeyer: Could we not persuade you to retain the office? It would seem to me that if it could be made absolutely necessary for the chapter secretaries to cooperate.

The Secretary: It takes about six letters to get a reply out of some of the secretaries, and those have to be paid for out of the Treasury. The Secretary's office costs too much, but I cannot cut it down.

Mr. Wehmeyer: Is there any action this convention could take to remedy that? We could make it obligatory that this information be handed in but not before a man is made a member.

The Secretary: I would like to hear about the suggestions I have given you.

Mr. Johnson: I have the same feeling that you have. I have watched these secretaries for many years, and in reading the secre-

7

tary's report, it is like you say your prayers. You know all about C. I. Reed on paper, but personally, I do not know his attitude. The general attitude is that we do not know what you have had to contend with, and it is my feeling that we can go back to our chapters and tell our secretaries to be more business-like and get out and help. These fellows are students and put this thing off till the last. If we can get them to help I think we can retain your services. I promise to go back to Epsilon with that message.

Secretary: I will say that the cooperation is better this year than in the past.

Mr. Fabian: I nominate Mr. Reed as Secretary for another year.

The President: Motion made and seconded. All in favor of Mr. Reed as our next Secretary say "Aye".

Motion carried unanimously.

The Secretary: I will accept upon this basis: that you make it possible to have every secretary removed that doesn't cooperate. That sounds like autocracy, but it is necessary. I have much on my hands in the way of personal affairs, and I am not getting enough time for them. I am under physical handicap, and I ought to have duties that are less heavy. I would like to have a chapter secretary removed that cannot or won't do his part. I thank you for the honor.

Mr. Wehmeyer: I move that a committee be appointed to consider methods for easing out the work that must be done, or, if a compensation be needed, to put it before the convention.

Mr. Keefe: Will that committee change the constitution. The duties of the chapter secretary are very vaguely outlined, and the average secretary coming into the office would be entirely at sea as to his duties.

The Secretary: When you elect officers in the spring for the following year, report those officers in promptly. Time and again I have had to write three or four times to find out who is secretary. Two or three years ago, Iota did not report when Miss Smith became secretary, and I wrote seven letters before I found out. She had not been told what to do.

The Vice-President: In reporting officers, I think that if the election of chapter officers be made in March, when the chapters are still functioning, it would be necessary to move that forward more than two months. That is just a suggestion, when you take up the constitution.

Mr. Wehmeyer: If the officers of the previous meetings were always present to meet the following officers. When I was elected secretary, that was the case, and the President held things off to wait until I got back. We have always had the first meeting opened by the old officers.

The Secretary: I think that question will have to be an amendment to the constitution.

Mr. Wehmeyer: I move that the committee be instructed to take up this recommendation for the constitution.

The Secretary: It is already included.

The President: Nomination for Treasurer will be next.

Mr. Wehmeyer: I nominate E. H. Stewart for Treasurer.

Miss Smith: I second the motion.

Mr. Fabian: I move that the nominations be closed.

The President: Vote shows that the motion is carried, and E. H. Stewart is both our old and our new Treasurer. If there is nothing further, we might start with the revision of the constitution.

The Secretary: I think it is due to the Convention to explain that Dr. Noland and Dr. Cutler and I got together to get up a report of recommendations regarding the constitution. Please understand that if there is any of this report that you do not understand or agree to, we are only making recommendations on the basis of our own experience. If they do not seem feasible to you, please do not feel that we are trying to railroad anything. First, the petition from Illinois. This report is not accompanied by any recommendations from the faculty. I know that the faculty are not opposed to this, but merely have not taken any active part. It is purely a student movement. The Central Governing Body unanimously recommends acceptance of the petition.

The President: You have heard the suggestion.

Mr. Wehmeyer: Everyone knows that the University of Illinois is the type that we should try to get into Phi Sigma. I move that we grant this chapter to Illinois.

Mr. Johnson: Should that be sanctioned?

The Secretary: I have thought of that. Might it not be possible to accept that provisionally—as to the usual requirements?

Mr. Johnson: I think we should proceed with caution in order not to have a recurrence of other experiences.

Mr. Fabian: I make motion to accept that provisionally, that we accept the petition with the provision that it have the approval of the faculty recommendations.

Mr. Kirby: It is not necessary, as the University of Illinois has a known high standing, and names on the pages are certainly sufficient.

The President: I feel sure that it must be an oversight that the faculty recommendations are not included.

Mr. Fabian: I think there is no harm in leaving it as it is.

The President: All in favor so indicate. (Motion carried.)

Mr. Woodward: Must that be voted on again by the chapters?

The Secretary: There is no referendum required. In this connection, let me recall that years ago we accepted a petition for a chapter in the North Dakota Agricultural College to be known as Gamma Chapter. It was passed on late in the spring of 1916. There were ten members. They asked that the chapter not be installed until the next fall. Eight of the ten people did not return to the school. Then came the war. The chapter has never been installed. This year, I have had a man with me in Chicago who has promised to do everything he could to revive things there, and later present a petition for the installing of Gamma Chapter.

The President: I hope that can be done. Is there anything further along this line?

The Secretary: I am going to read the things that we recommend to you. That would make it read, "Recognizing the necessity of, and the mutual benefit to be derived from an organization devoted to research in biological sciences and a careful investigation into, and a free discussion of the same".

3
The President: Would it not be better to read all of it first and then take them up separately?

The Secretary: It will take too much time.

Mr. Fabian: I move that we take this up and act upon each separately.

The President: It is moved and seconded. Motion so carried.

Mr. Wehmeyer: I take it that the National Governing Body has in mind a definite policy. It seems that the idea be made that of research, and I took the attitude to be one more or less undergraduate work; but the whole thing is permeated with that idea; and I wonder if the idea very definitely changes a policy of that sort into a purely research society or what? I would like to have an expression on that.

The President: The idea is that whatever changes are made would be but to stimulate the work, not necessarily among graduate students, but the students, from sophomore up, who can do the work and assist them all we can. If we can do that, we are doing something for students who are having nothing done for them now.

Mr. Wehmeyer: The reason I raise that question is that we are likely to come into contact with the object of Sigma Xi. We should not have a duplication.

The Secretary: In a recent communication sent around through all of the officers, I stated that the function of the Phi Sigma is very definitely not that of a rival to Sigma Xi; the insertion of the word "research", meaning that we are trying to get more attention turned in that direction and not merely scholastic interest.

The Vice-President: Also that our purpose is rather to encourage.

Mr. Wehmeyer: Should not that be stated in the preamble—that our object is to stimulate and encourage research.

The Secretary: That will be stated further on. I have explained our function as dealing with a zone here in people's careers between the time when they take the freshman courses in biology and the time when they become definitely established as scientists, when they have entered the "State Academy of Science," etc., when they should have the definite responsibility of preparing and presenting work in a formal way. It doesn't seem to me that the Phi Sigma is a place to go and hear something, but to go and have some one listen to you. The idea is to get you and every other member to present work.

Mr. Wehmeyer: There have been criticisms as to why we should join Phi Sigma and I thought that should be stated there.

The President: Is there anything further? All those in favor of the preamble as read so signify.

Mr. Wehmeyer: I move that it be accepted.

The President: Moved and seconded that the preamble as read be accepted.

Vote shows unanimous acceptance.

Owing to lack of space, further detailed report of proceedings will be omitted and the whole condensed in a general statement. The constitution as finally amended is printed elsewhere. There are, however, certain significant points in the discussion that should come to attention.

The suggestion was made that the editor of the Biologist be included in the Council. It was pointed out, however, that selection

of a properly qualified person could but be made by allowing the Council to select an editor.

There was much discussion of the advisability of having regional vice-presidents or representatives who could come more directly into contact with the chapters in their respective regions; also it was pointed out that this might serve as a training for higher national offices.

There was also a heated discussion as to the advisability of having a convention every year. Some objected to this because of the expense. In fact, this seemed to be the only objection. Several chapters had definitely instructed the delegates to oppose such action. The question was deferred from the morning session until after certain other questions, especially that of finances, were settled, when the plan was adopted as set forth in the constitution. After the third convention, whatever plan seems best to serve the society may well be put into operation. The secretary held out for an annual convention in the belief that it would require meetings of annual frequency to enable Phi Sigma to reach the highest degree of development. Otherwise, if the second convention did not occur for two years, most of the good accomplished by the first one would be lost and the work have to be done over. The compromise was so arranged that the Phi Sigma convention will coincide with the four year general meetings of the American Association.

Another point on which there was considerable discussion was the election of honorary members. The officers recommended ratification by the Council of the selection of honorary members because of the tendency of the chapters at times to make selections rather indiscriminately.

The duties and activities of chapter were much more clearly defined and it is believed this will do away with much of the misunderstanding that has occurred in the past. The clumsy designation of Central Governing Body gave place to National Council.

On the question of the charter fee for new chapters there was further heated discussion. The recommendation was for a fee of \$75.00, but the secretary presented a minority recommendation of \$100.00 on the grounds that a chapter could not be installed and the membership carried for any less. Even now, with petitioning bodies of any size the cost per charter member is less than for others initiated after the chapter is installed.

The classification of members caused lively debate on the proper status of members who are eligible to active membership but do not pay dues. The question of the status of professional students occupied much time. Owing to the fact that medical students very often are confronted with a schedule that precludes activity in Phi Sigma, a suggestion was made that such students in professional specialties which are built on biological sciences be excluded entirely from membership. This was, however, overruled, because it was recognized that many desirable members would be excluded.

Another change of great importance was the abolition of the unanimous vote requirement for election to membership. The change in time of election of chapter officers and the clearer definition of the duties of the chapter officers should go far toward simplifying relations with the national officers.

The question of dues and fees proved a very troublesome one. In order to finance the convention, it was felt that a part of the

7
initiation fee should be set aside for that purpose. This insures that each member shall bear a part of the expense of at least one convention.

A petition was presented by Dr. Bert Cunningham, Zeta, on behalf of a biology group in Duke University (Trinity College), but was referred to the Council for more information.

Regarding the future policy for The Biologist, it seemed to be the consensus of opinion that this should be made more of a scientific magazine, including both original papers and abstracts.

Perhaps the most significant development of all was the plan for a scientific program each year in conjunction with the Association, whether there is a convention or not. In this connection, the reader is referred to the letter from Dr. Livingston and the Secretary's reply, dealing with this development.

In the last moments of the session the Secretary set forth the following points as a platform for Phi Sigma:-

1. Scientific program each year for active members.
2. Establishment of an endowment fund for the support of research.
3. A "Biology Day" fostered by each chapter each year.
4. Inter-chapter exchange of speakers.

An activity not to be overlooked was the Phi Sigma luncheon attended by the delegates, officers, and several other members of various chapters.

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